
		BioMinE - FP6 Project IP NMP2-CT-2005-500329			
BioMinE Deliverable DI.3					
Nature: Report & data tables			Dissemination Level: Confidential		
Project Start Date: November 1, 2004			Deliverable Due Date: 31/10/06 Actual Submission Date: 07/09/08 (V2)		
Deliverable Lead Contractor			BRGM		

The Deliverable DI.3 of the BioMinE Integrated Project is a report entitled:

"Finalised initial database on primary and secondary resources for biotechnological metal extraction - a review of non-ferrous mineral deposits in Europe"

The level of dissemination of this deliverable is confidential. A public summary is proposed hereafter.

Public Summary:

The BioMinE Integrated Project aims to investigate and demonstrate the opportunities for applying bioleach processes to representative primary and secondary metal-bearing resources in Europe. Although various process options for treating metal concentrates are either already well established or will be identified during the BioMinE technology development programs, the real challenge is to demonstrate the economic feasibility of these technologies when applied to specific European ores, concentrates, and secondary resources with complex mineralogy, low grade, or derived from medium- to small-sized deposits.

An ultimate selection of metal deposits is required whereby various flow-sheet configurations for bioleaching of ores, concentrates, or processing waste can be identified, developed, and economically evaluated. The objective of this deliverable DI.3 is to present the selection of mineral resources in Europe that have been retained as targets for BioMinE RTD. The listing is not exclusive as the fast development of the non-ferrous metal market segment in Europe in reply to the actual steep commodity prices influences the administration of mining reserves, project ownership and mine development. Known deposits may become re-evaluated and new deposits may be discovered as more attention for non-ferrous metal exploration is drawn to Europe.

By using pre-existing know-how from BRGM on continent-scale mineral deposit databases and past efforts to start compiling European mineral deposit information, the study in this report could query a database hosting over 12,000 European metallic and non-metallic mineral deposits all recorded in over 40 fields of information. Following an earlier defined focus on copper, zinc, gold and accompanying commodities, a further selection on available information, and a final evaluation on importance and metal potential about 200 deposits have been retained and summarized in the annex to this report. A similar analysis for secondary resources is impossible due to the heterogeneous spatial coverage and often incomplete availability of the information. Instead the work will focus on existing initiatives, industry information, and case-by-case opportunities.