



Secondary Mining: Mine Closure and Remediation Techniques Seminar, 17.4.2015

Auditorio Instituto GEA, Universidad de Concepción, Concepción

Organizers:

Instituto de Geología Económica Aplicada (GEA,)

Universidad de Concepción,

Technische Universität Bergakademie Freiberg (TUBAF), Germany,

Wismut GmbH, Chemnitz, Germany

Contact: Marcia Vargas Mac-Carte; marvarga@udec.cl, Fono:(56-41)2204862

Introduction:

Secondary mining offers the opportunity not only to recover minerals or elements of economic interest not separated in past process streams or accumulated during prolonged residence of the processed sediment in tailings impoundments. It also constitutes a new possibility for an up to date environmental deposition of the re-processed material. This short seminar combines the observations from an ongoing R & D project carried out by the Mining Academy of Freiberg together with the University of Concepción, as principal local university counterpart, and the experience of more than two decades of the Wismut GmbH. Wismut GmbH is a state-owned company dedicated to the closure and remediation of Uranium mining sites in Germany after the re-unification. Experience gained in the process goes well beyond Uranium mining. The seminar concludes with a round table dedicated to recurring monitoring and analytical challenges in secondary mining.

Presentations will be in English, discussions and round table in English and Spanish. Each presentation is followed by 5 minutes of discussion.





9.00-9.30: Registration of participants

9.30-9.45: Opening. Prof. Sonia Helle, Director of Instituto GEA

9.45-10.25

Dr Nils Hoth (TUBF Freiberg): “Secondary mining- the opportunity to combine recovery of elements of economic interest with improved environmental deposition of the gangue”.

10.25-11.05

Dr. Michael Paul (Wismut GmbH): - the East German uranium ore mining sites - one of the largest mine closure/ remediation projects of Europe - achievements, prospects and challenges."

11.05-11.45

Dr. Thomas Metschies (Wismut GmbH) : "Mine residues as sources of emissions – cover options to avoid dust emissions and water leakage”.

11.45 – 12-15 Break for coffee and sandwiches

12.15 – 12.55

Dipl. Chem. Andrea Kassahun (Wismut GmbH) : "Mine water treatment at Wismut – Examples, challenges and new technologies”.

Round table discussion: Challenges in monitoring and analysis in secondary mining.

Participants:

Prof. Sonia Helle (Instituto GEA) – Chemical analysis

Dr Nils Hoth (TUBAF) – Hydrochemical understanding of mining residue “ore” bodies

Dipl. Chemist Andrea Kassahun (Wismut GmbH) – Sequential extractions

Dipl. Ecologist María Ussath (TUBAF) – Field XRF measurements

Dr Michael Paul (Wismut GmbH) – Radiation monitoring

Dr Thomas Metschies (Wismut GmbH) – Water flux and transport modelling in mining bodies

Dr Ursula Kelm (Instituto GEA) – Mineralogical phase characterization.

13.00-13.40

Each member of the panel will offer a 5 min. introduction to his or her field of expertise.

Discussion: 13.40- 15.00