

26 April 2021

## Webinar

# Management of Mining Environmental Liabilities

## Agenda

Monday 26 April 2021

16:00 – 17:30 CEST

16:00 - 16:05

**Gerardo Herrera**  
European Commission

Welcome

16:05 - 16:10

**Simon Michaux**  
Associate Professor, Geological Survey of Finland (GTK)

Introduction to the webinar

16:10 - 17:00

**Fredy Guzmán-Martínez**  
Mexican Geological Service (SGM)  
Co-Chair ASGMI Expert Group on Mining Environmental  
Liabilities

“Mining Environmental Liabilities: Towards  
sustainable management. A global vision in  
Ibero-America”

**Mauricio Pereira**  
Researcher in the Division of Sustainable Development  
and Human Settlements, Economic Commission for  
Latin America and the Caribbean

“Mining Environmental Liabilities: A regional  
view”

**Ernest Barcelo**  
Vice-President Sustainability, Omya  
Chairman of IMA Environment working group

“From cradle to cradle: Best practices of  
managing the life cycle of mining operations”

**Achim Constantin**  
MinSus Project Director, Federal Institute for  
Geosciences and Natural Resources of Germany (BGR)

“Experiences of the MinSus programme in  
managing mining environmental liabilities in  
the Andean region – case example La Ciénaga”

**Ysmael Ormeño Zender**  
Head of Project Implementation Department, Activos  
Mineros SAC

“Management of remediation projects for  
environmental liabilities of mining”

17:00 - 17:25 Q&A

17:25 - 17:30 *Closing remarks*



**Fredy Guzmán-Martínez**  
**Mexican Geological Service (SGM)**  
**Co-Chair ASGMI Expert Group on Mining Environmental Liabilities**

Fredy Guzmán-Martínez holds a BSc (Hons) in Biology with specialisation in Natural Resources Management from the Higher Technological Institute of Zacapoaxtla, Mexico. He also holds an MSc in Engineering from the Pontifical Catholic University of Chile with specialisation in Mining and the Environment. He is currently a PhD student in Environmental Research, Modelling and Risk Assessment at the Higher Technical School of Mining and Energy Engineers of the Polytechnic University of Madrid. Since 2006 he has collaborated in the Department of Environmental Geology of the Mexican Geological Survey as Project Manager, where he has participated in several related topics such as the environmental impact assessment of mining activities, mining environmental liabilities, environmental baseline studies, protected Natural Areas and their relationship with mining activity, land use planning, and acid mine drainage.



**Mauricio Pereira**  
**Researcher in the Division of Sustainable Development and Human Settlements**  
**Economic Commission for Latin America and the Caribbean**

Mauricio Pereira holds a BSc in Civil Engineering and an MSc in Economics from the University of Chile. He is a researcher in the Division of Sustainable Development and Human Settlements. He has coordinated and conducted studies on sustainable mining, including the management of mining liabilities, economics for climate change, analysis with general equilibrium models for sustainability, and indicators of sustainable development. He is an advisor in various countries on the measurement of expenditures and investments to protect the environment, and a member of international teams evaluating measures for environmental management and quantifying natural disaster-related damage. He has been a professor at the University of Chile and the Andrés Bello National University on topics related to i) the role of the state, ii) public policies and macroeconomics, iii) social evaluation of projects, and iv) environmental and natural resource economics. He is a peer reviewer of indexed journals and has published in international journals and organisations.



**Ernest Barcelo**  
**Vice-President Sustainability, Omya**  
**Chairman IMA Environment working group**

Ernest Barcelo is an Industrial Engineer from Polytechnic University of Catalonia (UPC, Spain) and holds a Master's from the same University and the EFQM. An IESE PDD Business Management Graduate, he is also pursuing a PhD in Chemical Engineering at Aalto University (Finland), and taught Integrated Management Systems on the Quality Management Master programme at UPC (Spain) from 2001 to 2012. He joined Omya in 1997 as Director of Quality Management and Environment at Omya Clariana (Spain) and now holds the position of Vice-President Sustainability for the Omya Group (Switzerland). He oversees issues related to compliance and management systems at corporate level. With calcium carbonate being used in multiple applications, Ernest is member of various industry associations. He is an active member of the Calcium Carbonate Association Europe (CCA-Europe) and chairs the Environment working group at Industrial Minerals (IMA-Europe). Since 2016, he has been a member of the Latin American Chamber of Commerce in Switzerland (LATCAM).



**Achim Constantin**  
**MinSus Project Director**  
**Federal Institute for Geosciences and Natural Resources of Germany (BGR)**

Achim Constantin holds a BSc in Geology with specialisation in Hydrogeology, Environmental geology, Hydrochemistry and Remediation of contaminated sites from the University of Vienna, Austria. He has 15 years of professional experience in research projects and the remediation of environmental liabilities in Austria and Germany. Between 2013 and 2018, he worked as an Integrated Expert CIM (Centre for International Migration and Development) / GIZ (Deutsche Gesellschaft für Internationale Zusammenarbeit GmbH) in the General Directorate of Environmental Quality of the Peruvian Ministry of the Environment (MINAM), where he supported the development of a regulation on soils and tool techniques for the management of contaminated sites. From 2015 to 2018, he also acted as Secretary of the Latin American Network on Prevention and Management of Contaminated Sites (ReLASC). Since January 2019, Achim Constantin has worked for the Federal Institute for Geosciences and Natural Resources of Germany (Bundesanstalt für Geowissenschaften und Rohstoffe, BGR) as a Project Director in the German Cooperation programme "Regional Cooperation for Sustainable Management of Mining Resources in Andean Countries – MinSus".



**Ysmael Ormeño Zender**  
**Head of the Construction Management Department**  
**Activos Mineros S.A.C.**

Civil Engineer and certified Project Management Professional (PMP®) with a Master's Degree in Construction Management and Administration from the National Engineering University (UNI, Peru). Ysmael Ormeño is currently Head of the Construction Management Department of Activos Mineros S.A.C., a public company of the FONAFE Corporation under private law, that is dedicated to the remediation of mining environmental liabilities. He has more than 20 years of professional experience leading project portfolios and Project Management Offices (PMOs) in various fields. He has extensive experience as Project Manager in multidisciplinary teams for the development of projects, the supervision and construction of buildings, public, educational, retail and environmental infrastructures. Vice President PMI Lima Peru Chapter 2021. Lecturer and facilitator in several national universities teaching the fundamentals of the PMBOK® and agile principles. He holds PMO-CP® and SMPC® certifications.



**Simon Michaux**  
**Associate Professor of Geometallurgy**  
**Geological Survey of Finland (GTK)**

Simon Michaux is Associate Professor of Geometallurgy at the Geological Survey of Finland (GTK), in the KTR Circular Economy Solutions Unit. His current roles at GTK are to develop: geometallurgy capability in battery minerals, the GTK-Mintec pilot plant with digitalisation and machine learning upgrades, and the Circular Economy. He is a Bachelor of Applied Science in Physics and Geology, and holds a PhD in Mining Engineering from the Julius Kruttschnitt Mineral Research Centre (JKMRC), from which he graduated in 2006. Thesis title: Analysis of Fines Generated in Blasting. He gained most of his work experience in the Australian mining industry. He studied and worked for the JKMRC for 18 years, where he was involved in several high-profile industry funded research programmes. He worked in the private sector for the Engineering, Procurement and Construction Management company Ausenco. Here he serviced mining corporate clients in the Technical Solutions Division, where geometallurgy is used to support pre-feasibility studies. He worked in Belgium for 2 years as a Senior Research Officer in the Mineral Engineering, Materials and Environment Department (GeMME) at the University of Liege. His role involved developing department capability in electrodynamic fragmentation using a Selfrag EDF instrument. He was furthermore responsible for developing alliances and partnerships between GeMME and stakeholder groups across Europe. This cooperation resulted in a series of research proposals submitted to H2020 and EIT KIC. His areas of technical interest are rock and material characterisation, comminution, blasting, electrical dynamic fragmentation, process engineering separation, material science, and multi-phase data analysis of geometallurgical data sets and modelling the mining process as a dynamic system. He is most interested in modelling the energy systems that support the industrial ecosystem and the environmental fallout of industrialisation.