

PRELIMINARY PROGRAM

(7 plenaries + 49 presentations = 56 presentations as of August 12)

Represented Countries (11): Argentina, Australia, Brazil, Canada, Chile, Germany, New Zealand, Peru, Spain, UK and USA

Inauguration Ceremony, Wednesday, September 9

Words of Welcome

Mimy Mackenzie, Conferences and Publications Manager, Gecamin, Chile

Joanne Heyes, Planning for Closure 2020 Chair; Head of Resource Engineering, BHP Technical Centre of Excellence, Australia

Glen Corder, Associate Professor, Sustainable Minerals Institute, The University of Queensland, Australia

Juan Palma, Academic, Pontificia Universidad Católica de Valparaíso, Chile

Opening Addresses

Title to Be Confirmed

Joanne Heyes, Planning for Closure 2020 Chair; Head of Resource Engineering, BHP Technical Centre of Excellence, Australia

Integrated Mine Closure: from Guidance to Good Practice on the Ground

Aidan Davy, Chief Operating Officer, ICMM, UK

Plenary Session 2, Thursday, September 10

Social Aspects and Stakeholder's Involvement in Mine Closure Planning

Katherine Nolan, Social Performance Principal, Anglo American, UK; and **Ursula Weber**, Corporate Relations Manager and Social Development Copper, Anglo American, Chile

Title to Be Confirmed

Paul Maidstone, Environment Manager, Glencore, Chile

Plenary Session 3, Friday, September 11

Closing and Rehabilitating Before the Closure: The Benefits of Progressive Mine Closure

Kim Ferguson, Global Practice Lead Closure, BHP, Australia

Are We Asking Enough off the 'Right Questions' When We Use Modelling to Predict Closure Performance?

Mike O'Kane, President, O'Kane Consultants, Canada

Panel Discussion, Thursday, September 10**“Design and Construction of the Closure Plan: A Task for All”**

- Chair: **Petri Salopera**, Country Manager Ecuador y Chile, Newcrest Mining, Ecuador
- Introductory Presentation by Special Speaker:
 - **Estrategias de Codelco para involucrar a las distintas áreas del negocio minero en el cierre (TBC)**
Eduardo Sanzana, Corporate Mine Closure Director, Codelco, Chile (TBC)
- Panelists:
- **Eduardo Sanzana**, Corporate Mine Closure Director, Codelco, Chile (TBC)
- **Gonzalo Padilla**, Senior Specialist Asset Resource Management – Secondment, BHP, Chile
- **Alejandra Vial**, Corporate Environment Manager, Antofagasta Minerals, Chile
- **Eva Tobar**, Permit Manager, Lundin Mining, Chile
- **Jorge Campos**, Senior Mining Consultant, Arcadis, Chile

Session 1 - Design of Mining Operations for Closure

(6)

(A15) Closure Plan, the Right Moment to Start

Ana Lima, Nexa Resources, Brazil

(A22) Integrating Closure to Life of Asset Planning through Anglo American’s ICPS–Los Bronces Case Study

Eduardo Salfate, Golder, Chile; and Eduardo Loo, Anglo American, Chile

(A49) Knowledge Base: Using Digital Tools for Mine Closure Management

Luanna Di Guimarães, Aika Miura, Antônio Gentini, Lucas Fonseca, Daniel Anton and Karin Formigoni, Arcadis, Brazil

(A58) Progressive Mine Closure –Define this Sustainable Development Practice for your Mine Rock Stockpile

Terryyn Kuzyk, Miriam Clark, Chris Mills, Andrew Baisley and Mike O’Kane, O’Kane Consultants, Canada

(A60) GIS Planning for Mine Closure Management

Francisco Sepúlveda and Rodrigo Cádiz, Arcadis, Chile

(A72) Enabling Public Participation in Mine Closure Planning

Sarah Mackenzie, Kamila Svobodova, Jo-Anne Everingham and Kathy Witt, Sustainable Minerals Institute, The University of Queensland, Australia

Session 2 - Closure Risk Assessment

(5)

(A07) Closure Risk Modeling: A Management and Planning Tool

Germano Araújo and Thiago Oliveira, DF+ Engenharia Geotécnica e Recursos Hídricos, Brazil; and Isabela Diniz, Vale, Brazil

(A08) A Risk-based Management in Mine Closure – Practiced Examples in Brazil

Ana Taveira, Hace Consultoria, Assessoria e Treinamento, Brazil; and Luis Sánchez, University of São Paulo, Brazil

(A30) Reviewing the Impact Produced In Air Quality Due To Infrastructure Decommissioning and Mine Closure Activities

Valentina Zolezzi, Andrés López, Camila Soler and Javier Mancilla, Wood, Chile

(A34) A Rational Method of Risk Assessment for Mine Waste Storage Facilities

Michael James, Michel Julien, Pascal Lavoie, Edouard Masengo, Thomas Lepine, and Edouardine Ingabire, Agnico Eagle Mines, Canada; and Karen Choven, Enviro Integration Strategies, Canada

(A36) Integrating Operational Reports of Tailings Deposits with Mine Closure Risk Assessment: A Proposal for Sernageomin Report Contents

Andrés López, Valentina Zolezzi, Abraham Figueroa and Juan Carlos Torrejón, Wood, Chile

Session 3 - Mine Closure Regulations and Standards

(5)

(A16) Mine Closure and Legal Adequacy: The Aguas Claras Mine Case

Amanda Pereira, Prefeitura Municipal de Mariana, Brazil

(A66) Implementation of Chile's Mine Closure Law: Critical Analysis of the Regulatory Framework. Challenges and Proposals

Paulina Riquelme, Jorge Brower and Ignacio Funes, Eelaw, Chile

(A53) Critical Comparison between International Standards and Chilean Practice related to Physical Stability of Mine Waste Dumps in Mining Closure

Daniela Puma, Priscilla Torres, Leonardo Dorador, Eloy Santos, José Campaña and Rodrigo Cádiz, Arcadis, Chile

(A73) New Mine Closure Standards Required By Sernageomin

José Correa and Andrés León, Sernageomin, Chile

(A74) Tittle to Be Confirmed

Alfonso Domeyko, Sernageomin, Chile

Session 4 - Chemical Stability of Mine Wastes

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(A12) Ion Exchange Resistant GCLs for Exposed Liners and Capping for Mine Closure

Michael Donovan, Minerals Technologies, USA; and Dennis Wind and Barbara Gebka, CETCO, USA

(A40) Waste Rock Dumps and Tailings Facility Cover Depth Definition Using Numerical Models

Fernanda Baladrón, Kevin Vidal, José Miguel Espinoza and Arnaldo Santander, Golder, Chile; and Gabriel López, Minera Alumbrera, Glencore, Argentina

(A48) Reducing Uncertainties of Coverage Systems for Mine Waste Closure: Design and Modelling

Carla Gonçalves, Luanna Di Guimarães, Lucas Fonseca and Karin Formigoni, Arcadis, Brazil; and Mauricio Gómez, Arcadis, Chile

(A52) Challenges of Chemical Stability Analysis for Mine Closure

May-Lin Almendras and Carolina Gómez, Arcadis, Chile

(A71) Use of Mineral Resource Estimation Methods for NAG/PAG Waste-Rock Material Management

Óscar Benavente, Joled Nur and Lilian Valdebenito, SRK Consulting, Chile; and Francois Swanepoel and Yerko Delgado, Salares Norte, Gold Fields, Chile

(A75) Connecting Waste Rock Management and Cover Systems to Implement the Mine Closure Planning In a Mine Located In Peru

Sheyla Palomino, Pablo Quesada, Alonso Huamán, Mariel Samanez, Melitza Cornejo-La Torre, Miguel Mendoza and Eduardo Ruiz, Amphos 21, Peru; and María Medina and José Ruiz, Independent Mining Consultant, Peru

Session 5 - Closure of Tailings Deposits

(4)

(A04) De-Characterization and Closure of TSF: Concepts of the Brazilian Legislation and International Criteria

Débora Schaper, Ricardo Lessa and Antônio Freitas, Golder, Brazil; and Björn Weeks, Golder, Canada

(A19) Structured Decision-Making: Tailings to Landform Design for the Closure of Legacy Tailings Storage Facilities

Rahul Peroor, Sasha Schuck and Terry Braun, SRK Consulting, USA; and Trevor Chesal, BHP, USA

(A29) Draindown Estimation Analysis from Tailings Facilities Depending On Modeling Approach

Fernanda Baladrón, Kevin Vidal and José Espinoza, Golder, Chile

(A46) Tailings Dam Decommissioning and Closure in Consideration of Erosion Risks

Neeltje Slingerland, Golder, Canada; Diego Barra, Golder, Chile; Chris Waygood, Golder, Australia; and Adam Auckland, Golder, Canada

Session 6 – Mine Closure, Good Practices and Case Studies

(6)

(A55) Globe Progress Pit Closure Planning

Stephanie Hayton, Duncan Ross, Jeff Nyenhuis and Megan Williams, OceanaGold, New Zealand; Luke Matheson, PDP, New Zealand; Calvin Wu, Engineering Geology, New Zealand; and Will Olds and Paul Weber, Mine Waste Management, New Zealand

(A06) Innovative Passive Mine Water Treatment Case Studies

Ryan Schipper, Golder, Peru; and Eric Blumenstein, Neal Gallagher and Paige Pruisner, Golder, USA

(A56) Passive Treatment for Elevated Iron and Arsenic in Circum - Neutral Mine Affected Water

Stephanie Hayton, Duncan Ross, Jeff Nyenhuis, Megan Williams and M. Clarke, OceanaGold, New Zealand; D. Trumm, Verum Group, New Zealand; Will Olds and Paul Weber, Mine Waste Management, New Zealand; and Travis Horton, University of Canterbury, New Zealand

(A20) Recovery of Byproducts from Pit Lake Waters

John Schubert, Chloe Grabowski and Julie Horan, HDR, USA; and Sriram Ananthanarayan, BHP, USA

(A64) Mine Closure – Special Civil Engineering for Effective and Permanent Closure of Mines

Peter Banzhaf, BAUER Spezialtiefbau, Germany

(A78) Colquirrumi: From being Mining Environmental Liabilities to Mining Assets

Mario Cedron, Pontificia Universidad Católica del Perú

Session 7 - Post Closure Land Use

(5)

(A02) Feasibility Evaluation of Mining Post-Closure Uses Using Risk-Based Management Methodology

Fernanda Guabiroba, Alexandre Matos and Alessandro Nepomuceno, Kinross Brasil Mineração, Brazil; Ana Taveira, Haze Consultoria Assessoria e Treinamento, Brazil; Solange Sánchez, Baturité Consultoria, Brazil; and Luis Sánchez, University of São Paulo, Brazil

(A41) Post Closure Land Use Study Using A Multi-Criteria Decision Approach

Antônio Freitas and Ricardo Lessa, Golder, Brazil

(A63) The Challenges of Sustainable Use of Abandoned Underground Flooded Mines as Geothermal Resources

Ramón Díaz, Universidad de Concepción, Chile; and Paulino Fernández and Lorena Álvarez, Universidad de Oviedo, Spain

(A70) Thinking Beyond Closure: Why Bother?

Anna Littleboy, Guy Boggs, Glen Corder, Fiona Haslam-McKenzie, Bruce Kelley, Jason Kirby and Bryan Maybee, Sustainable Minerals Institute, The University of Queensland, Australia

(A68) Mining as a Temporary Land Use: A Global Scoping Project on Transitions and Repurposing

Sarah Holcombe and Julia Keenan, Sustainable Minerals Institute, The University of Queensland, Australia

Session 8 - Post-Closure, Monitoring and Maintenance

(4)

(A17) Satellite InSAR Applications for Long-Term Displacement Monitoring of Closed Sites

Jonas von Ruetze, Jaime Corredor and David Holden, 3vGeomatics, Canada

(A37) Evaluation of the Terrestrial Vegetation Bioaccumulative Effect on the Trifolium Repens “Clover” and Calamagrostis Sp. “Ichu” Species in Abandoned Mining Areas

Lizardo Cahuana and Osvaldo Aduvire, SRK Consulting, Peru

(A18) Assessment of the Erosional Performance of a Semi-Arid Rehabilitated Mine Site and Development of a Predictive Model

Jon Pelletier and Nathan Abramson, University of Arizona, USA; Terry Braun, David Ludwick and Rahul Peroor, SRK Consulting, USA; Satya Chataut, BHP, USA; and Evan Howard, Landloch Pty, Australia

(A54) Developing Geomorphic Design Guidelines for Closure Landforms at the Mount Polley Mine

James Ogilvie, Rowland Atkins and Katy de Rego, Golder, Canada

Session 9 - Reclamation and Rehabilitation

(5)

(A03) Mining Waste Reclamation: Transforming a Dump site to an Ecological Park- Design and Feasibility Study

Asieh Hekmat, Ramón Díaz and Francisca Rodríguez, Universidad de Concepción, Chile; and Mansour Edraki, The University of Queensland, Australia

(A45) Pilot Restoration Project in Loma for the Purpose of Closure in the Operation of the Cristina Quarry- UNACEM

Julio César and Marisela Huamán, J. Cesar Ingenieros & Consultores, Peru; and David Cueto and Juan Carlos Mesías, UNACEM, Peru

(A25) Reclamation and Soil Coverage Assessment through Satellite Imagery

Silmara Silva, Fernanda Guabiroba, Alexandre Araújo, Alexandre Matos, Osmar Ferreira and Alessandro Nepomuceno, Kinross Brasil Mineração, Brazil; and Kele Craveiro and Vinicius Rissoli, Santiago & Cintra Consultoria, Brazil

(A69) Indigenous Groups, Mined Land Rehabilitation and Mine Closure: Exploring the Australian Terrain

Rodger Barnes, Sarah Holcombe and Joni Parmenter, Sustainable Minerals Institute, The University of Queensland, Australia

(A65) Ecosystem Carbon Storage in the Mining and Smelter Impacted Landscape of Sudbury, Ontario, Canada

Peter Becket, Laurentian University, Canada

Session 10 - Economic Evaluation and Funding Of Closure Plans

(3)

(A09) Governance Provision Model for Assets Decommissioning

Richardson Faría, Isabela Diniz, Adriana Rocha, Ana Silva, Tayane Castilho and Paulo Ribeiro, Vale, Brazil

(A11) Importance of Asset Closure Planning in the Long - Term Viability of a Mining Business

Jussara Januário and Fabiano Mendanha, Vale, Brazil

(A67) Review of Financial aspects of Chile´s Mine Closure Law: Challenges and Proposals

Jorge Brower, Paulina Riquelme and Ignacio Funes, Eelaw, Chile

ABSTRACT DISTRIBUTION

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