

Mining and Metallurgical Society of America

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Mining and Metallurgical Society of America 2021 ESG WEBINAR SERIES #1 ESG Experts Panel Discussion Date: October 01, 2021 OP ENHANCEMENT COMMITTEE

A recent survey conducted by law firm White & Case found that 45% of key industry decision-makers expected Environmental/Social/Governance (ESG) issues to represent the largest risk to the industry and nearly 79% of those surveyed said they expect investors to push the industry more aggressively on ESG. The accepted standards of environmental stewardship, social license and governance of mineral endowments are constantly changing. QPs must know the issues of importance to society and be prepared to adapt and respond to changing societal norms.

The QP Enhancement Committee offers a series of webinars about ESG designed for the professionals working for mining companies and those involved in the preparation of studies and disclosure documents. The series will also be of interest to the legal, financial, management and academic sectors of the industry.

Five webinars are planned:

- 1. ESG Panel of Experts Discussion highlighting the broad ESG issues of today, and tomorrow.
- 2. Environmental and permitting meeting the standards demanded by governments.
- 3. Social issues how to obtain and secure the "social license" to operate.
- 4. Governance making the right ESG decisions in the Board Room.
- 5. ESG 101 for Investors summarizes the preceding four sessions.

The first Webinar is a Panel session and assembles experts in all three ESG areas. Over the course of 90 minutes the panel discussion will identify and introduce topics of importance which are faced by mining companies, mineral property developers and explorationists today.

The ESG #1 Panel consists of the following experts:

Social - Lauren Meyer.

o General topics: Prioritizing social considerations has become key to maintaining a social license to operate. With the help of existing standards and the examples of unique sustainable solutions, mine designers and operators can take innovative steps to achieve sustainable development goals and meet sustainability pledges. However, in order to leverage the multiplicity of benefits that ESG provides, we must look at sustainability through a new lens — one that shifts our focus from ticking boxes to meet ESG requirements, to truly designing with sustainability in mind. Sustainability should be incorporated

into every phase of new or existing projects, making it a key element of the design, operations, and closure processes.

o Bio: Ms. Meyer is a Geotechnical Engineer certified as an Envision Sustainability Professional (ENV SP) since 2019. Lauren sits on the steering committee for Stantec's Sustainable Mining by Design initiative, and is actively pursuing ways to incorporate sustainability into the project management framework and project delivery. She is also currently serving as the president of the Northern Colorado Branch of ASCE, and as the Chair of the Women@Stantec Colorado Chapter.

Environmental – Patrick Williamson.

o General topics: Patrick will provide his perspective on industry best practices for environmental management, the environmental baseline studies required for different stages of mine development, and the operational requirements for characterizing and managing waste rock, tailing and water at mining projects.

o Bio: Patrick Williamson has over three decades of experience in managing geochemical and hydrogeologic investigations for mining projects, including water balances, water resource evaluation and development, waste rock characterization, mine dewatering, and permitting studies for due diligence, Preliminary Economic Assessments, Feasibility Studies, operations, and closure. He is an experienced project manager/principal with a technical focus on mine waste geochemistry/hydrogeology and extensive experience in the mining sector in Mexico and Latin America. Prior to joining INTERA, Patrick established and managed two hydrogeology/ environmental practices in Mexico, where he developed business offerings for mine hydrogeology, geochemistry and social license for water and mining. Patrick has spoken extensively on the topic of best practices for environmental management for mining at conference throughout Latin America.

ESG #1 Chat and Questions

During the presentation and Question and Answer period, the following comments and questions were submitted by the attendees.

(Note: the following questions are not in time order because some are from Chat and some are from Questions. Minor edits were made.)

Francisco Sotillo -- How do you maintain continuity on the representatives of stakeholders for the length of the project? Some communities elect their leaders for a short period of time, and with different ideas. Also, how to determine their representativity.

Peter Dolph -- have mines considered trust funds to maintain water management equipment costs and professional staffing needs after mine life?

Alex Edstrom -- You've shown a few "carrot examples" of ESG. Do you have any examples where ESG wasn't implemented and it negatively affected an operation?

Ann Carpenter -- Will the presentations be shared? *Ans: Yes. recording will be posted as well as the chat questions.* Will the PPTs-PDFs also be available? Thanks *Ans:Yes. Slides will be available as PDFs.*

David Kelley -- You mentioned a reliance on surface water - why is there not more focus on ground water supply for local communities, especially in small Andean communities?

Francisco Sotillo -- How to communicate to people about the new technologies for getting water without competing for the actual land sources in a given place? For example, using desalinated sea water for the

project, such as in the case of Tia Maria. The message is not going through. This may be tied to history of the mines. How do you promote the actual information on environmental new technology used?

Marco Carrasco -- In my opinion, in addition to what has been presented, in order to minimize social and environmental risks, it is necessary to implement protocols and policies from the initial stages of mining projects (field geology and exploration). The initial stages are the basis for the success of the projects, the communication plan is the key. Trust with communities and stakeholders is gained from the beginning.

Peter Dolph -- Is there any cost data on price per ounce or price per pound for water management for the industry as a whole? This could be used as a baseline for investment.

Alex Edstrom -- What do you think is the primary reason for short-sited lack of investing in environment?

Chat

From Betty Gibbs to Everyone:

Welcome to the MMSA Webinar on Environment/Social/Government. This is the first of a series. From Nina Astillero to Hosts and panelists:

Have you seen a comprehensive strategy amongst several mining companies to increase D&I as opposed to singular strategies per company or sites?

From Alistair Kent to Everyone:

Bougainville, Esquel, Tambo Grande ...

From Alex Edstrom to Everyone:

Thanks Lauren and Patrick. Great presentations!

From Ann Carpenter to Everyone:

Excellent Webinar

From Ronel Kappes to Hosts and panelists:

Thanks!

From Francisco Sotillo to Hosts and panelists:

Thank you for your help!, Great presentations.

From Marco Carrasco to Everyone:

Thanks very much!!!

From Jordi Ventura to Everyone:

Great Job - Jordi

From Peter Dolph to Hosts and panelists:

Thanks