

TAILINGS MANAGEMENT, INNOVATIVE ENGINEERING, AND TECHNOLOGY TRANSFER

Matt Fuller, CPG Monica Moncada, Ph.D. 05 June 2019 Our Clients are First, the Team is Second, and I am Third.



# **OVERVIEW**

- Presentation provides examples of Tierra Group's "State of the Practice" engineering, to advance safe tailings disposal, and
- Our ability to transfer these "Leading Edge" technologies to mine sites around the world.
- We will be presenting:
  - In-Pit Tailings Disposal using Filtered Tailings;
  - In-Pit Tailings Disposal using Conventional-Slurry Tailings;
  - Tailings and Waste Rock Co-Disposal using Tailings "Cake";
  - "Eco-Tails" Tailings and Waste Rock Co-Disposal using Filtered Tailings; and
  - Waste Rock used to Buttress a Centerline Tailings Dam.



# **IN-PIT TAILINGS DISPOSAL – CONVENTIONAL SLURRY TAILINGS**







# DEWATERED TAILINGS ARE REMOVED AND PERMANENTLY STORED IN A CO-DISPOSAL (WASTE ROCK/TAILINGS) FACILITY







# IN-PIT CO-DISPOSAL – DEWATERED TAILINGS ("CAKE") AND WASTE ROCK







# IN-PIT FILTERED TAILINGS DISPOSAL

### GUATEMALA





# "ZERO-HEAD" IN-PIT TAILINGS DISPOSAL METHOD (CONVENTIONAL SLURRY)

#### NICARAGUA





500

475

450

425

400

375

E

ELEVATION



# VERTICAL-SLOPE LINING TO EXPAND TAILINGS STORAGE CAPACITY

## Honduras















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MEXICO

# Waste Rock used to Buttress a Centerline Tailings Dam







# THANK YOU FOR THE OPPORTUNITY TO INTRODUCE TIERRA GROUP'S TAILINGS EXPERIENCE TO YOU!

## **QUESTIONS?**

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