

Lessons Learned from Recent Tailings Dam Failures: A Path Forward

September 14-15, 2017

JW Marriott Hotel

San Antonio, Texas

Organized by the USSD Committee on Tailings Dams

Recent tailings storage dam and coal combustion residual impoundment failures have cast a negative light on the mining and power generation industries in the US and around the world. Proper design, operation and regulation of these waste facilities is vital to maintain the public safety of the communities they are located in. Understanding the causes of these recent failures and examining lessons learned from previous historic failures is crucial to adequately respond to public safety and environmental impact concerns.

This 2-day workshop include both presentations by experts as well as break-out groups and discussion. Day 1 will provide insight on the Kingston, Mt. Polley and Samarco failures from a technical standpoint, as well as reactions and follow-up measures being implemented by dam safety officials, owners, engineers and other stakeholders.

Day 2 will bring together the diverse group of consultants, owners, dam safety and mine safety officials, regulators and other non-government agencies to discuss the changes being implemented in Canada and elsewhere, and proposed changes which should be implemented in the US. Break-out groups will be formed to discuss design changes, regulatory changes and operations changes which should be considered in response to the failures.

The workshop will be hosted by USSD but is being held adjacent to the ASDSO conference to maximize interaction between regulators, dam safety officials, owners and consultants. Confirmed speakers include Dirk VanZyl with UBC, Bill Walton with GEI Consultants, Tamara Johndrow with Freeport McMoRan and John Lupo with Newmont. Additional speakers will be added as they are confirmed.

September 14: Morning Session

Introductions

Safety Share

Opening Thoughts

Historic Tailings Dam Failures and Regulatory Response

Mt. Polley Failure Mechanism Summary

Samarco Failure Mechanism Summary

Kingston TVA Failure Mechanism Summary

September 14: Afternoon Session

ASDSO Regulatory Reactions to Recent Failures

Canadian Regulatory Reactions to Recent Failures

Facilitated Panel Discussion. Panelists will include stakeholders such as:

Regulators

Owners

MSHA

NGO's

September 15: Morning Session

Breakouts:

Group 1: Practical design changes which should be implemented as a result of lessons learned from recent failures

Group 2: Regulatory changes which should be implemented as a result of the lessons learned from recent failures

Group 3: Owner/operation changes which should be implemented as a result of the lessons learned from recent failures

Breakout discussion topics for each group will include ideas such as:

- Alternative tailings disposal technologies
- Minimum slopes and other prescriptive regulations
- FMEA or risk-based approaches
- Critical controls and governance

September 15: Afternoon Session

Group 1 Report back

Group 2 Report back

Group 3 Report back

Group discussion and suggested path forward

Closing Thoughts