SAFETY GUIDELINES AND GOOD PRACTICES FOR TAILINGS MANAGEMENT FACILITIES

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EXAMPLES OF HISTORICAL ACCIDENTS

At least 221 serious tailing management facilities accidents reported by UNEP. (http://www.mineralresourcesforum.org/docs/pdfs/Bulletin121.PDF)

CAUSES OF ACCIDENTS

• Inadequate management
• Lack of control of hydrological system
• Errors in site selection and investigation
• Unsatisfactory foundation, lack of stability of downstream slope
• Seepage
• Overtopping
• Earthquakes and landslides

MAIN ROOT CAUSE:
RISK ANALYSIS AND RISK MANAGEMENT NEGLECTED
• Both Parties to the Conventions mandated the Joint Expert Group (JEG) to draw up safety guidelines and a summary of good practices for tailings management facilities.

• JEG prepared the safety guidelines which constitute a minimum set of requirements to ensure a basic level of safety for TMFs.

• Guidelines based directly upon the body of work produced by the global community of dam safety, scientists, professional bodies and intergovernmental agencies:
  – European Commission
  – International Commission on Large Dams (ICOLD)
  – UNEP
  – International Council on Metals and Mining (ICMM)
  – Others…
• Governments should provide leadership and frameworks to facilitate the development, safe operation and decommissioning of TMFs.

• The operators of TMFs have the primary responsibility for ensuring safety.

• All parts of TMF and all live-cycle (planning–construction–operation–closure–rehabilitation) of TMF should be considered.

• Abandoned TMF’s should be taken into account.
• Only competent, properly certified and trained personnel should be engaged in the planning, design, construction, operation/management and closure of TMFs

• TMFs should be operated in accordance with the construction, safety and environmental norms and best practices

• Risk assessment is part of TMF operation

• Risk management including emergency planning has to be applied
Recommendations:
• to UNECE member countries:
• to competent authorities
• to tailings management facility operators

+ Annexes:
• Pre-construction and construction
• Operation and management
• Inspection
• Abandoned sites identification, classification and management
• Emergency planning
Conclusion

Safety guidelines (as not legally binding document)
• intends to help to operators and competent authorities to increase TMF safety
• should be implemented by UNECE member countries, competent authorities and operators to reach a harmonized safety level for TMFs.
Thank you for your attention!