

TAILINGS 2026 – WHERE TO NOW?

MARCH 2026 CONFERENCE

3–4 MARCH 2026 – CONFERENCE | 5 MARCH 2026 – TECHNICAL VISIT
Indaba Hotel, Spa and Conference Centre, Fourways

ECSCA and SACNASP Validated CPD
ActivityCredits = 0.1 per hour attended

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ABSTRACTS RECEIVED

TSF-specific water balance as a standard practice

A. Scholtz, K. Uderstadt, G. Howell, *SRK Consulting, South Africa*

Influence of K0-consolidation on the critical state undrained shear strength of sandy soils in triaxial compression

Y. Narainsamy, *University of Pretoria, South Africa*

Undrained shear behaviour and constitutive response of remoulded gold tailings under varied confining pressures

B. Alaro, Y. Narainsamy, *University of Pretoria, South Africa*

A summarised introductory technical note relating to a selected mine tailings waste development

I. Wermuth, *South Africa*

Geochemical characterisation of re-mined copper tailings in Democratic Republic of Congo (DRC) best practices that can be adopted in South Africa?

M.G. Dube, *WSP Africa, South Africa*

Financial provisions for rehabilitation in South Africa

M.J. Cole, *University of Cape Town, South Africa*

Classification of tailings by clay minerals and pore water chemistry as a basis for safe tailings disposal

A. Vietti, N.C. Steenkamp, *Vietti SlurryTec, South Africa*

New method for tailings valorisation

S.W. Robertson, *Mintek, South Africa*

Harnessing remote monitoring technologies and applying AI data analytics to provide real time surveillance of tailings storage facilities in accordance with current guidelines

D.J. Capstick, *Central Alliance, United Kingdom*

A review of Aachen™ high shear reactors in tailings retreatment processes

W.J. Botes, B.N Wagner, *Maelgwyn Africa, South Africa*

Design of deposition and water management system for an in-pit deposition tailings storage facility

K.M. Wilkinson, D. Maharaj, K. Wood, T. Thyse, P. Goosen, *Paterson & Cooke, South Africa*

The day in the life of a Tailings Storage Facility (TSF) closing the loop on GISTM compliance

J. Nel, A. Bovim, *Dassault Systèmes and Insight Terra, South Africa*

The development of representative monitoring networks for tailings management using risk-based principles

T. Isaac, *GCS (Pty) Ltd, South Africa*

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Modelling tailings behaviour: A comparison of NorSand, PM4Silt, and PM4Sand constitutive frameworks

K. O'Brien, P. le Roux, *ARQ Consulting Engineers, South Africa*

Assessment of acid neutralisation in microbially induced calcite precipitation-stabilised co-disposed coal waste beds under synthetic acid rain exposure

I. Hajee, S.T.L. Harrison, A. Kotsiopoulos, *University of Cape Town, South Africa*

A new tool for Tailings Storage Facility management: Insights from archived satellite imagery

V. Nell, B. Forrest, *PhotoSat, South Africa*

Remote sleeving of a penstock outfall pipeline

L.H. Spies, G.C. Howell, M. Brink, *SRK Consulting, South Africa*

From static to adaptive: Advancing tailings risk frameworks through dynamic weighting

B. Koovarjee, M. Becker, J. Broadhurst, J.R. C von Holdt, *University of Cape Town, South Africa*

Evaluating the accuracy of stage capacity assessments in predicting key life cycle dates for a Tailings Storage Facility

T. Bezuidenhout, K. Moll, J. Visagie, *SRK Consulting (Pty) Ltd, South Africa*

Using distributed fibre optic sensing to detect, quantify and locate seepage and strain throughout tailings infrastructures

S. Johansson, *Hydro Research, Sweden*

Direct push-in casing installation method for shapearrays in a TSF: A cost-effective and efficient alternative to traditional borehole techniques

A. Jonson, A. Silva, C. Moore, *South Africa*

The influence of dilative and contractive layering on the stability of tailings storage facilities

R.T. Bamisaye, *Stellenbosch University, South Africa*

Is the GISTM applicable to sand mining?

R. Rakotoarimanana¹, G.C. Howell², N.G. Macfarlane², ¹Rio Tinto, Madagascar, ²SRK Consulting, South Africa

Characterisation of the reworked residual norite in the Rustenburg Region

E. Zannoni, T. Grobler, G. Heymann, *Knight Piesold, South Africa*

Assessment of causeway-induced loading on penstock towers in Tailings Storage Facilities

S.C.T. Luis, T. Armstrong, *SRK Consulting, South Africa*

Assessment and mitigation of slope stability risks for TSF closure

P. Sharma, M. Govender, *WSP India, India*

Tailings index testing in the modern era: beyond Atterberg limits

P.F. Oelofse, N. Mincione, H.A.C. Meintjes, *SRK Consulting, South Africa*

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Comparative review of alternative approaches to establish the inundation zones for filtered stack tailings facilities

W. Dlamini, *WSP, South Africa*

Determination of clay shear strength under a tailing embankment

P. Oelofse, N. Mincione, A. Meintjes, *SRK Consulting, South Africa*

Adapting to change: Filtered tailings and the future of tailings management

K. Naidoo, V. Balakistan, *WSP Africa, South Africa*

Improving tailings dewatering with ATA® for paddocked buttress formation: A pilot study

J. van der Linde, E. Brooks, C. Spagnuolo, A.J. Fischmann, J. Raath, *Clean TeQ Water, Australia*

Quantifying tailings reuse potential through geotextile dewatering: A control modelling framework for integrated waste and water recovery

N. Budhai, *South Africa*

Impact of Norsand calibration variability on buttress design for upstream platinum tailings

G.D. McDonald, P.P. Roos, L.H. Spies, *SAICE, South Africa*

From legal framework to practice: How vale S.A. aligns EPRPs with GISTM and the SDGs in Brazil

J.E. Cordova, Y.A.R. Lebron, G.R. Barroso, L.F.C. Silveira, F.L.C. Lisboa, D.F. Melo, L. Ribeiro, B.R. Silva, M.F.D. Camargos, P.H.S. Simões, J.A. Silva, J. Pedra, J.G.M. Barsosa, V.A. Júnior, Vale S. A, Brazil, Brazil

Clay soil - a history of theoretical approaches to strength and the way forward

A. Smith, *Stellenbosch University, South Africa*

Investigating the physical suitability of tailings as a road construction material in South Africa

T.S. da Silva Burke, *Stellenbosch University, South Africa*

Collaborative accountability: Empowering roles in TSF governance and risk management

M. Brink, C.R. Mtshali, G.C. Howell, *SRK Consulting, South Africa*

Embracing variability in geotechnical and tailings engineering practice through integrating statistical rigour

G.C. Howell, N.G. Macfarlane, *SRK Consulting, South Africa*

Beyond disposal: Integrating geometallurgy and sustainability indicators for tailings functionality and reuse

S. Govender, J. Broadhurst, A. Kotsiopoulos, M. Becker, *University of Cape Town, South Africa*

Recent experiences in developing and reviewing emergency preparedness response plans for tailings dams

J. van der Merwe, S. Dennis, *NSW Mines Rescue, Australia*

Seeing the unseen - improved InSAR surface displacement monitoring with MDA CHORUS™

J. Baek¹, D. Hickson¹, P. Oliver¹, R. Morin¹, R. Podmore², *MDA Space, Canada*, ²Leica Geosystems, *South Africa*

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Geotechnical challenges and performance of tailings dams founded on organic soils, muskeg, and soft holocene deposits

A. Asefzadeh, Klohn Crippen Berger

Transparency and disaster orientation in the management of tailing storage facilities: Does the GISTM make a difference?

M. Nyagaa, L. Maraisa, C. Crous, University of the Free State, South Africa

Geometry, drainage, and stress state in TSFs: a critical state modelling perspective

P.F. le Roux, K.O'Brien, ARQ Consulting Engineers, South Africa

Application of remote sensing techniques in mapping abandoned Tailings Storage Facilities in Gauteng South Africa

M. Mpanza¹, L. Nqasha², ¹University of Johannesburg, ²University of the Witwatersrand, South Africa

Correlation between in-situ measured resistivity, pore pressures, and degree of saturation in gold tailings

J. Swanepoel, Knight Piésold, South Africa

Advanced constitutive modeling of gold tailings using norsand: calibration from stress paths and application to field stability conditions

J. Swanepoel, E. Zannoni, Knight Piésold, South Africa

State-dependent undrained strength envelopes for gold tailings from NorSand simulations

J. Swanepoel, Knight Piésold, South Africa

Cross-Calibrated In-Situ Shear Strength of Gold Tailings from CPT, Vane Shear and NorSand modeling

J. Swanepoel, Knight Piésold, South Africa

Field-Derived from dilatometer testing for improved stress state and capacity modeling of gold tailings dams

J. Swanepoel, Knight Piésold, South Africa

Validating residual undrained strength in gold tailings using CPT $Q_{tn,cs}$ correlations and NorSand modeling

J. Swanepoel, Knight Piésold, South Africa

Model-based back-calculation of void ratios in triaxial tests using NorSand stress path fitting

J. Swanepoel, Knight Piésold, South Africa

Catoca diamond mine – implementation of an advanced monitoring network for a Tailings Storage Facility (TSF)

K.L. Morton¹, M. M. Vigarío², F.M. Manassar², E.M. Paiva², L.E.L. Carlos², ¹KLM Consulting Services Pty Ltd, South Africa ²Catoca Mining Society, Angola

Importance of data quality in geotechnical management for ISO/IEC 17025:2017 accreditation

B. de Lacerda, Simplelab Tecnologia, Brazil