

JULY 2023

BURNSTONE TAILINGS
 STORAGE FACILITY (TSF)

DETAILS OF TAILINGS STORAGE FACILITY

Tailings Storage Facility (TSF) Name	Burnstone TSF
Operation	Burnstone
Operational Status	Dormant since 2015, to be recommissioned in 2026 subject to approved business plan
Operating Segment	RSA - Gold
Location	9km north-east of the town of Balfour in Mpumalanga Province – please refer to Figure 1
Latitude, Longitude (decimals)	-26,6224333, 28.6782361
Ore Source	Underground
Type of Storage Facility	Impoundment (upstream development)
Deposition Methodology	Cyclone
Year of Commissioning	2010
Consequence Classification (GISTM, 2020)	High - TBC following the Dam Breach Assessment
Operating Contractor	Stefanutti Stocks Inland (SSI)
Engineer of Record (EoR)	Knight Piesold (Pty) Ltd (KP)
Current Maximum Height (m)	6
Final Maximum Height (m)	35
Total Volume Already Deposited (Mm³)	0.8
Life of TSF (year)	N/A



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TECHNICAL ASPECTS:

Design Criteria

GISTM and best practice guidelines including Australian National Committee on Large Dams (ANCOLD) (Guidelines on Tailings Dams, July 2019). Site specific design criteria were specified by the EoR. Details will be included in the Design Basis Report (DBR) that is currently being prepared.

Stability Assessment and Mitigation Measures

A detailed stability assessment based on geotechnical investigations and laboratory test work will be conducted in Q4 2023.

A stability analysis under static, Mohr Coulomb (effective stress) conditions conducted in 2009 rendered a FoS above the recommended limits

Dam Breach Assessment

A dam breach assessment is currently being undertaken by the EoR and will include the Consequence Classification in accordance with GISTM. The results of which will be available in Q4 2023.

The zone of influence was determined by KP previously according to SANS 10286 – please refer to Figure 2. The TSF classified as a Medium Hazard facility

Zone of Influence

Has been identified by EoRs according to SANS 10286 – please refer to Figure 2

Summary of Human Exposure

Consequence classification will be based on Population at Risk (PAR). Communities have been identified within the current Zone of Influence and are being engaged through various means

DOCUMENTATION:

Site Specific OMS Manual

The OMS Manual is currently being prepared by the EoR and will be available in Q4 2023

Mandatory Code of Practice (MCOP) Document No: SER.EE.2.4B COP is in place (dated November 2021)



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Design Basis Report (DBR)

The DBR is currently being prepared by the EoR and will be available in Q4 2023

Environmental Management System

The Environmental Management System is ISO accredited (ISO 14001:2015)

The initial Environmental Management Programme (EMPr) is dated 2009.

Surveillance:

Surveillance Frequency

Daily by the Operator and quarterly reports of critical controls submitted to and reviewed by the EoR

Surveillance Technology/System

K2Fly Decipher

Deformation Monitoring

Interferometric Synthetic Aperture Radar (InSAR)

Phreatic Surface Levels & Pore Pressure Measurements

Standpipe piezometers

RISK MANAGEMENT / EMERGENCY PREPAREDNESS:

Risk Assessment

The Risk Assessment is currently being prepared by Sibanye Stillwater in collaboration with the EoR and will be available in Q4 2023

Risk Management

Site specific OMS Manual is currently being prepared
 Site specific Trigger Action Response Plans (TARPs) in place
 Critical controls established and implemented

Site Specific Emergency Preparedness & Response Plans (EPRP)

Version 2023 is currently being finalised and will be available in Q4 2023

An annual emergency mock drill for a catastrophic TSF failure will be undertaken in Q4 2023 with SSW employees and contractors.



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CLOSURE & POST CLOSURE

Closure Planning

In place - report prepared by Golder Associates
 (Golder Reference: 20355168-341348-2, April 2021)

Closure Costing

Adequate financial capacity in place
 Financials prepared by Golder Associates
 (Golder Reference: 20447293-349385-7, January 2022)

Asset Insurance Cover

In place – July 2022 to June 2023 (currently undergoing renewal)

Independent Reviews:

Independent Tailings Review Board (ITRB)

30 June 2023 with no material concerns identified

Future ITRB Review

2026

Performance Reviews

Annual and quarterly reports with inspections completed by EoR
 (KP Reference: RI301-00726/48 Rev 0, 1 May 2023)

Dam Safety Review (DSR)

Carried out by an independent third party in 2019/2020 with no material findings
 (KP Reference: 301-00840/02-006 Rev 1, February 2020)

Next review scheduled for 2026



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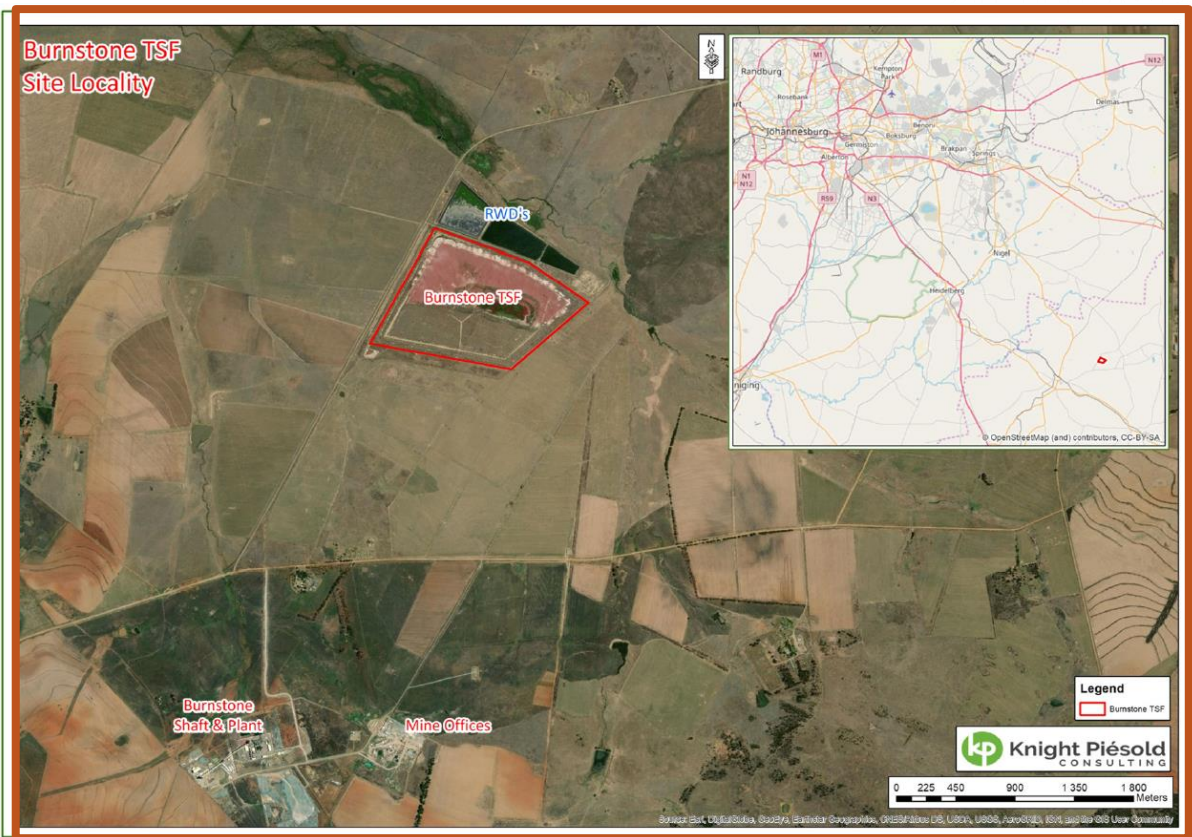


Figure 1: Layout plan of Burnstone

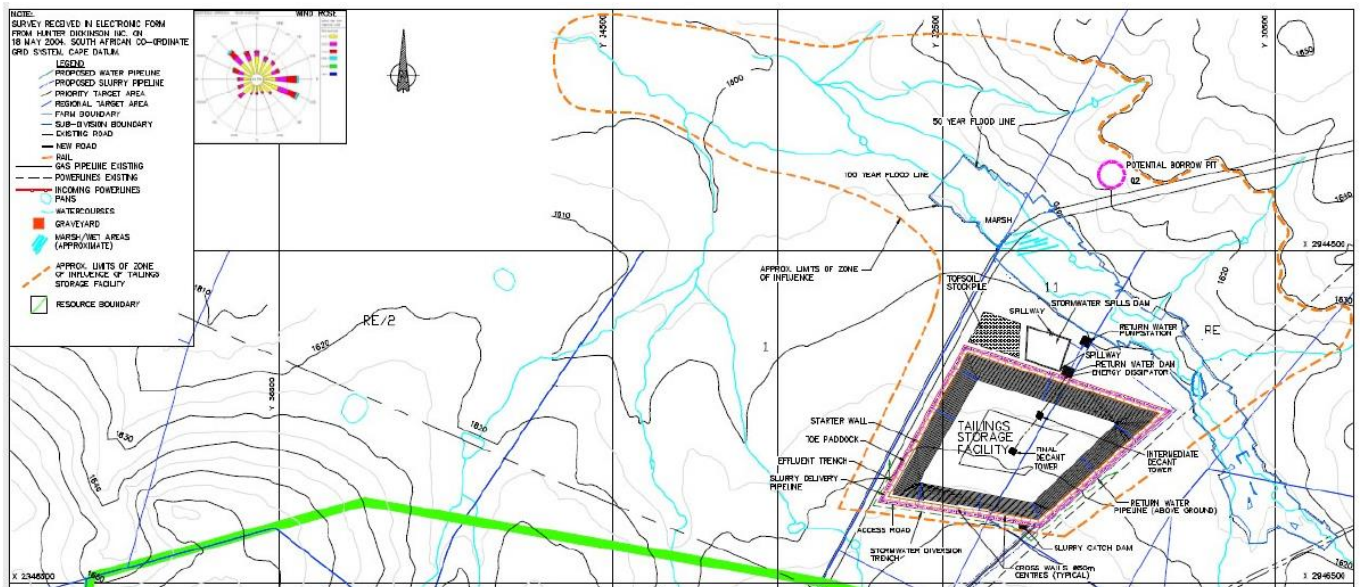


Figure 2: Zone of Influence according to SANS 10286