

DECEMBER 2023

BAOBAB TAILINGS STORAGE FACILITY (TSF)

DETAILS OF TAILINGS STORAGE FACILITY

Tailings Storage Facility (TSF) Name	Baobab
Operation	Limpopo
Mining Operation	Mogalakwena Platinum (Potgietersrus) Mining Operation (MPMO) owned by Anglo-American Platinum (AAP)
Operational Status	Active
Operating Segment	RSA - PGM
Location	50 km south of the city of Polokwane, and about 60 km southeast of Mokopane in Limpopo Province - please refer to Figure 1
Latitude, Longitude (decimals)	-24.3698, 29.4712
Ore Source	Underground
Type of Storage Facility	Impoundment (upstream development)
Deposition Methodology	Spigot with a possibility of converting to a hybrid paddock system in 2023
Year of Commissioning	2002
Consequence Classification (GISTM, 2020)	Very High
Operating Contractor	Minopex
Engineer of Record (EoR)	SLR Consulting (Pty) Ltd
Current Maximum Height (m)	18
Final Maximum Height (m)	40
Maximum Storage Capacity (tons/month)	95 000
Total Volume Already Deposited (Mm³)	7.9
Life of TSF (year)	2029 @1.6m/yr



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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 are included in the Design Basis Report (DBR).

Stability Assessment and Mitigation Measures

A detailed stability assessment based on piezocone probing was conducted in 2022.
(SLR Project No: 720.19129.00012 , February 2022)

All the FoS are above the recommended limits and thus no mitigation measures were required.

Dam Breach Assessment

Assessment completed in 2022
(SLR Project No: 710.19129.00010, October 2021)

Area of Inundation

Has been identified by EoRs – please refer to Figure 2 to 4

Summary of Human Exposure

Consequence classification has been based on Population at Risk (PAR). Communities have been identified and are being engaged through various means

DOCUMENTATION:

Site Specific OMS Manual

Version 2022 available
Mandatory Code of Practice (MCOP) Document No: MCOP-028 is in place (dated December 2022)

Design Basis Report (DBR)

Version 2022 available
(SLR Project No: 720.19129.00031 Rev 1, February 2023)

Environmental Management System

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

The initial Environmental Management Programme (EMPr) is dated 2010.



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Surveillance:

Surveillance Frequency

Daily by the Operator and monthly 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
AquaSense Retrofit piezometers (IoT device)

RISK MANAGEMENT / EMERGENCY PREPAREDNESS:

Risk Assessment

Annual Risk Assessment (Bowtie) completed with no untoward risk identified

Risk Management

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

Site Specific Emergency Preparedness & Response Plans (EPRP)

Version 2023 available

Annual emergency mock drill for a catastrophic TSF failure – undertaken on 20 June 2023 with SSW employees and contractors.

Environmental emergency preparedness is managed on site according to ISO14001: 2015.

CLOSURE & POST CLOSURE

Closure Planning

In place - report prepared by Golder Associates
(Golder Reference: 20141966-340303-10, March 2021)

Closure Costing

Adequate financial capacity in place
Financials prepared by Golder Associates
(Golder Reference: 21467928-349392-3, December 2021)

Asset Insurance Cover

In place – July 2023 to June 2024



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Independent Reviews:

Independent Tailings Review Board (ITRB)

29 June 2023 with no material concerns identified

Future ITRB Review

2026

Performance Reviews

Annual and quarterly reports and inspections completed by EoR
(SLR Project No: 720.19129.00031 Rev 1, March 2023)

Dam Safety Review (DSR)

Carried out by an independent third party in 2021. All recommendations at the time have been addressed in the last year.
(SRK Project Number: 502225, March 2021)

Next review scheduled for 2026



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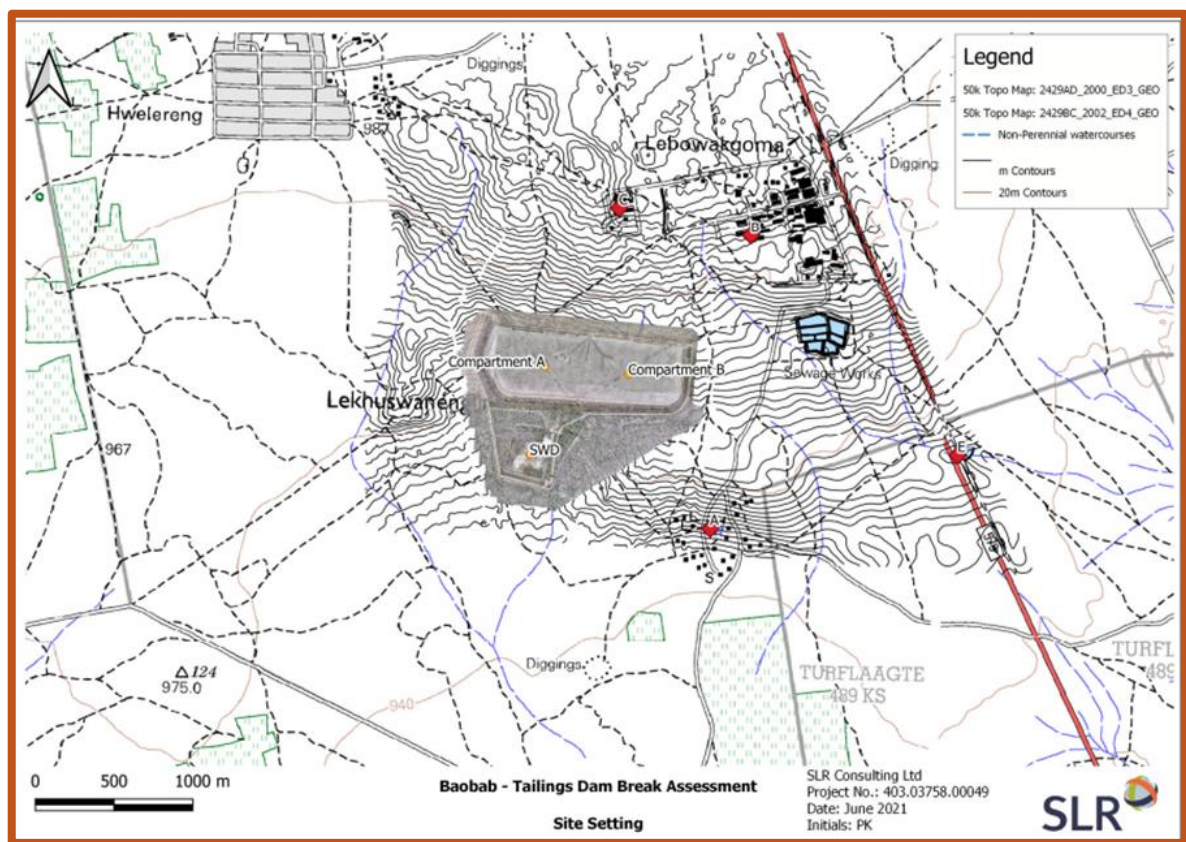


Figure 1: Layout of Baobab TSF



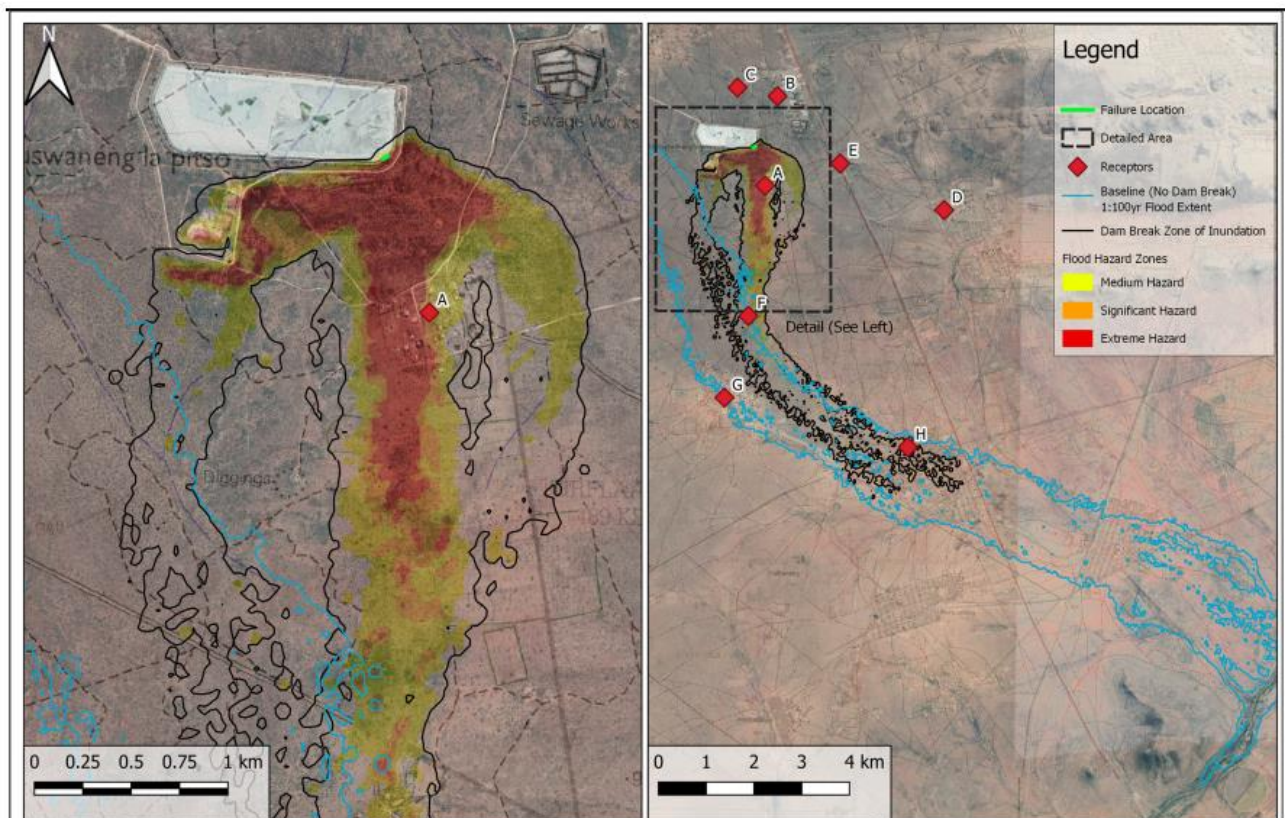


Figure 2: East Failure Area of Inundation

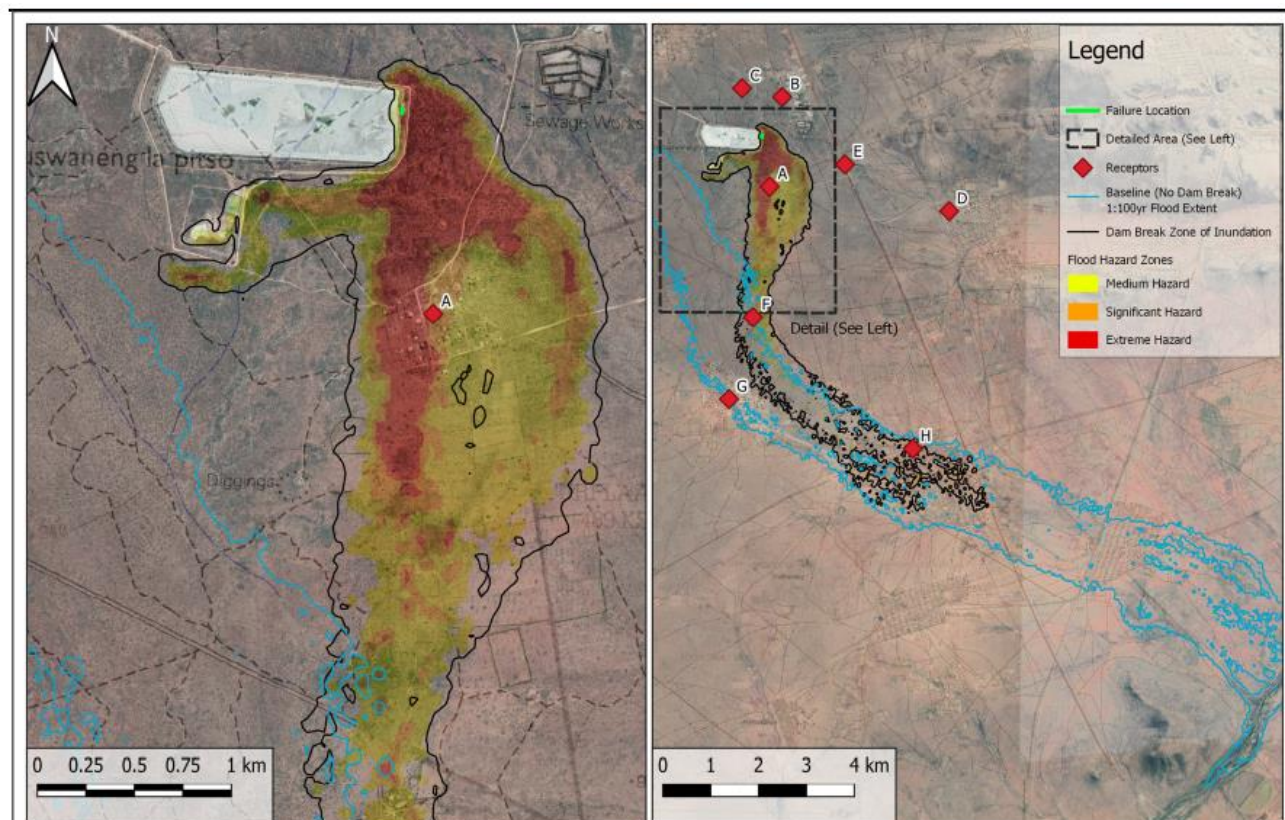


Figure 3: North East Failure Area of Inundation

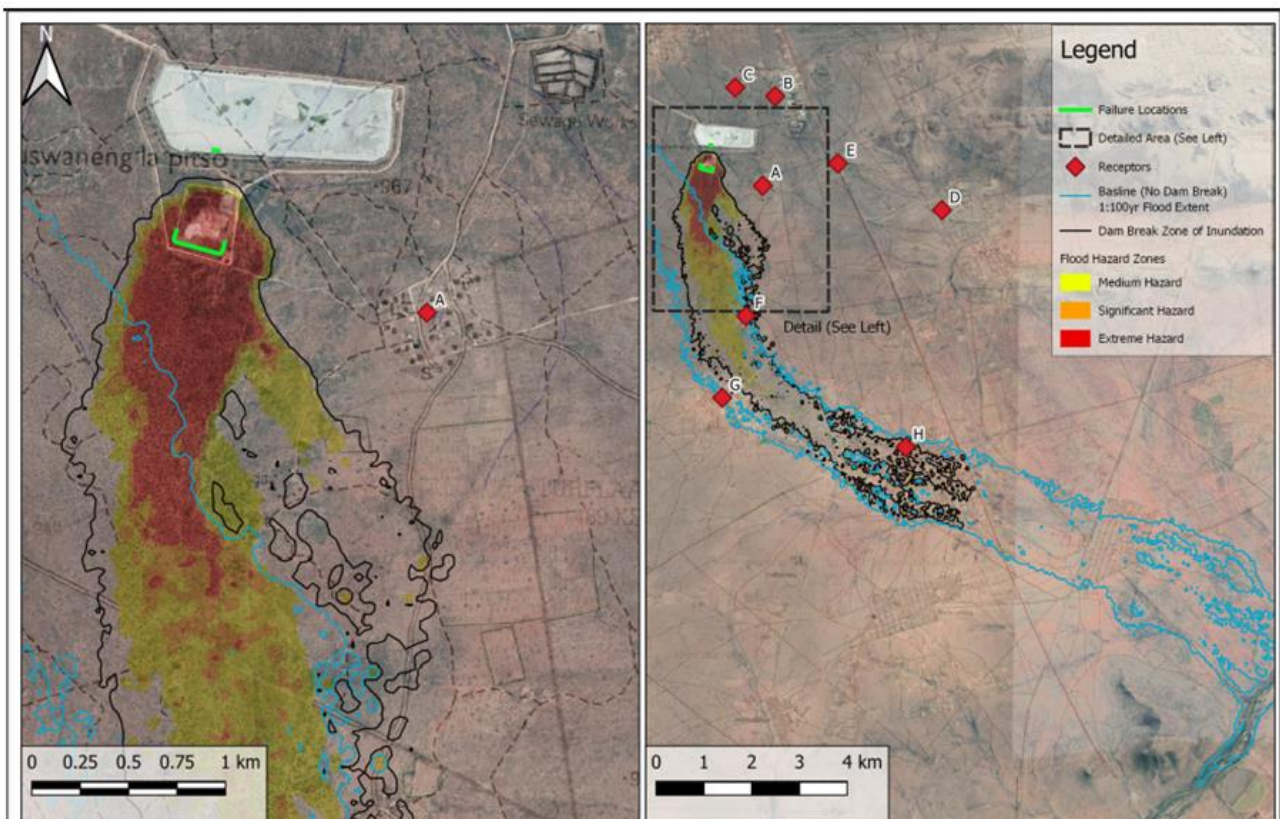


Figure 4: Storm Water Cascade Failure Area of Inundation