

**JULY 2023**

**EASTERN PLATINUM LIMITED  
 TAILINGS STORAGE  
 FACILITY (TSF) 2**

**DETAILS OF TAILINGS STORAGE FACILITY**

<b>Tailings Storage Facility (TSF) Name</b>	Eastern Platinum Limited Tailings Dam 2 (EPL TD2)
<b>Operation</b>	Marikana
<b>Operational Status</b>	Active
<b>Operating Segment</b>	RSA - PGM
<b>Location</b>	Tribal land Mogales (Turffontein 462JQ) in the district of Marikana in the North West Province - please refer to Figure 1
<b>Latitude, Longitude (decimals)</b>	-25.6872, 27.5957
<b>Ore Source</b>	Underground
<b>Type of Storage Facility</b>	Impoundment (upstream development)
<b>Deposition Methodology</b>	Spigot
<b>Year of Commissioning</b>	2002
<b>Consequence Classification (GISTM, 2020)</b>	Extreme
<b>Operating Contractor</b>	Fraser Alexander (Pty) Ltd (FAT)
<b>Engineer of Record (EoR)</b>	SLR Consulting (Pty) Ltd
<b>Current Maximum Height (m)</b>	36
<b>Final Maximum Height (m)</b>	65
<b>Maximum Storage Capacity (tons/month)</b>	310 000
<b>Total Volume Already Deposited (Mm<sup>3</sup>)</b>	17.7
<b>Life of TSF (year)</b>	2027 @2.5m/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.: 720.19129.00051 Rev 0, February 2023). The assessment indicated unacceptable FoS requiring mitigation measures.

Construction of a waste rock buttress and internal drainage systems was completed in September 2021.

### Dam Breach Assessment

Assessment completed in 2020 (SRK Report Number: 558195 Rev 0, September 2020)

### Area of Inundation

Has been identified by EoRs – please refer to Figure 2

### 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 including Community Engagement Forums (CEF)

## DOCUMENTATION:

### Site Specific OMS Manual

Version 2021 available

Mandatory Code of Practice (MCOP) Document No: SS-ZA-PGM's-MCOP-CON-TLS-0101 is in place (dated September 2022)

### Design Basis Report (DBR)

Version 2022 available (SLR Project No: 720.19129.00034 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 2012.



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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)  
 Vibrating Wire Piezometers (VWP's)

**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  
 Operating contractor Technical and Operational Risk Assessment System (TORAS)

**Site Specific Emergency Preparedness & Response Plans (EPRP)**

Version 2023 available

Annual emergency mock drill for a catastrophic TSF failure – undertaken on 29 June 2023 with SSW employees, contractors, Madibeng & Rustenburg Disaster Management Teams, first responders and second responders.

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



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## CLOSURE & POST CLOSURE

### Closure Planning

In place - report prepared by Golder Associates  
 (Golder Reference: 20141966-340280-9, June 2021)

### Closure Costing

Adequate financial capacity in place  
 Financials prepared by Golder Associates  
 (Golder Reference: 21467970-349390-1, December 2021)

### Asset Insurance Cover

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

## Independent Reviews:

### Independent Tailings Review Board (ITRB)

20 October 2021 with no material concerns identified

### Future ITRB Review

2024

### Performance Reviews

Annual and quarterly reports and inspections completed by EoR  
 (SLR Project No: 720.19129.00034 Rev 1, October 2022)

### Dam Safety Review (DSR)

Carried out by an independent third party in 2019/2020. All recommendations at the time have been addressed in the last 2 years.  
 (KP Reference: RI301-00877/2 Rev B, 25 August 2020)

Next review scheduled for 2024



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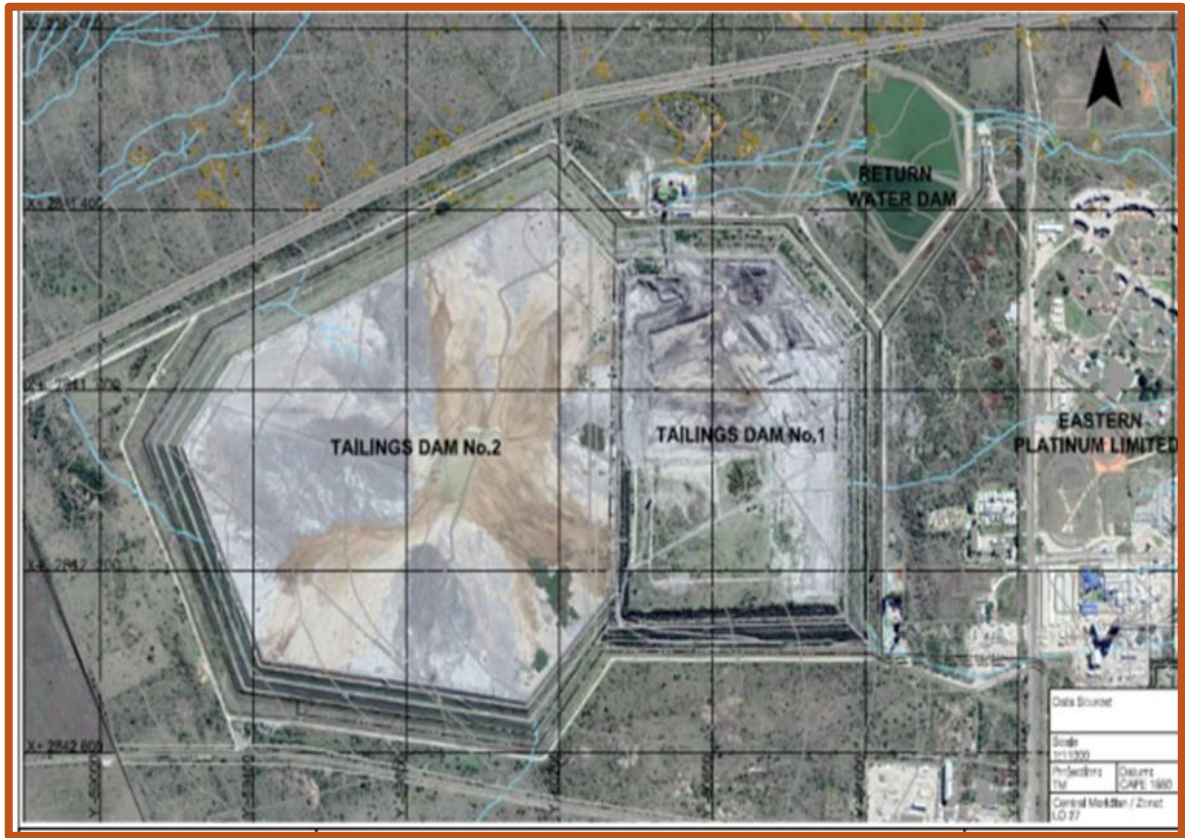


Figure 1: Layout of Eastern Platinum Limited Complex

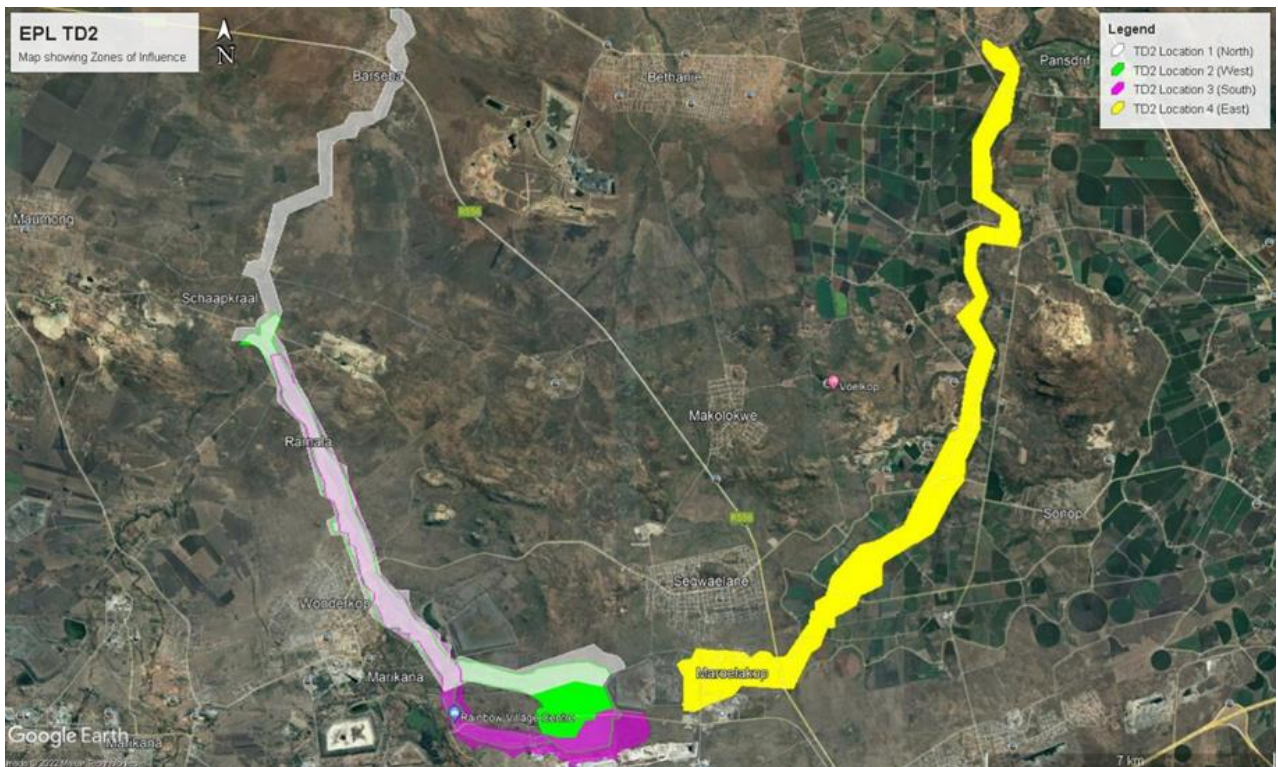


Figure 2: Consolidated view of the rainy-day failure scenario inundation boundaries