



GISTM Principle 15 – August 2023 Public Disclosure

Loulo Gold Mine

Loulo TSF

5 August 2023

PRINCIPLE 15

Publicly disclose and provide access to information about the tailings facility to support public accountability.

REQUIREMENT 15.1

- A. For new tailings facilities for which the regulatory authorisation process has commenced, or that are otherwise approved by the Operator, the Operator shall publish and update, in accordance with Principle 21 of the UNGP, the following information:**

Requirement 15.1 A is not applicable as this is an existing facility.

- B. For each existing tailings facility and in accordance with Principle 21 of the UNGP, the Operator shall publish and update at least on an annual basis, the following information:**

- 1. A description of the tailings facility (information may be obtained from the output of Requirements 5.5: Design and 6.4 : OMS)**

The Loulo Tailings Storage Facility is situated in the Kayes district of Mali, 370km Northwest of Bamako. The TSF is an unlined upstream self-raise facility owned by Somilo (a JV between Barrick Gold Corporation and the state of Mali). Somilo currently contracts Paragon Tailings to assist it with the daily operational activities associated with the TSF.

The TSF has been in operation since Sept 2005, with a current maximum height of 39.4 m (173.4 mamsl) and is designed to a maximum height of 42.0m (176 mamsl). The TSF has a current storage capacity of 61.4 million tonnes, with the total designed storage capacity of 74.0 million tonnes.

- 2. The Consequence Classification (Requirement 4.1).**

Facility Consequence Classification

Current Classification	Classification used for Design
Extreme June 2021	Extreme June 2020

- 3. A summary of risk assessment findings relevant to the tailings facility (Information may be obtained from the output of Requirement 10.1: Level of review /Risk Assessments);**

Summary of risk assessment findings

Reference	Risk driver PFM ¹	Existing controls	Additional Controls to Meet ALARP
RA ² 2023	Flow liquefaction of tailings	None	Buttress construction underway.

4. A summary of impact assessments and of human exposure and vulnerability to tailings facility credible flow failure scenarios (Information may be obtained from the output of Requirements 2.4 and 3.3)

Summary of Potentially Material Impacts

Aspect	Impact Description	Mitigation Measure
Biodiversity loss	Long-term loss of native vegetation formation consists of savannah, dry forest, agricultural ecosystem and agricultural land. Species of mammals and reptiles within the flood radius. Migration of avian species.	In the event of a dam safety emergency, the Emergency Preparedness and Response Plan (EPRP) will be initiated. This will address the immediate needs of communities and the environment. Further, this will be supported by developing and implementing the recovery and rehabilitation plan.
Wetland	Contamination of wetlands on a sub-catchment of the Gara River watershed.	
Surface Water contamination	Host communities' water will be impacted both locally and regionally in a sub-catchment of the Gara River watershed, which is part of the Falémé River basin, being the most important source of water in the area, thus limiting their access to daily water sources.	
Groundwater contamination	Overloading and contamination of groundwater sources previously accessible to communities. Contamination of borehole water around the flooded area through as a result of seepage coming into contact with shallow groundwater sources.	
Community relationships	It is expected that grievances will be raised from affected communities. Grievances will likely focus on the impacts to people's livelihoods, including impact to crops i.e., accessibility to land, livestock, and infrastructure such as	

¹ Risk Driver Potential Failure Mode (PFM) are:

- derived from ongoing TSF Risk Assessment work. List the risks that contribute the most to the total risk;
- list PFMs that are above the tolerable risk limit guidelines with controls in place before additional mitigation measures to meet ALARP

² RA: Risk Assessment

Aspect	Impact Description	Mitigation Measure
	houses. This will result in the deterioration of community relationships.	
Socio-Economic	Loss of land uses for economic activities. Loss of income for a large part of the local workers working in the mine with the likely halting of mining operations.	
Cultural heritage	In the event of failure, a local mosque and two cemeteries within the area may be inundated within the Boribanta area.	
Evacuation area	Villages that may require evacuation include Baboto and Boribatan.	
Human health	Potential destruction and contamination of key infrastructure (boreholes) in Baboto village and their associated access roads.	

5. A description of the design for all phases of the tailings facility lifecycle including the current and final height (Information may be obtained from the output of Requirement 5.5);

The TSF comprises the Old TSF and West Ext, which is an unlined, upstream, self-raise, paddock, ring dyke facility. The Old TSF is a closed ring dyke with four key embankments, while the West Ext is an open ring dyke with three embankments of which one is a common wall with the Old TSF. A rockfill buttress is in the process of being constructed around the perimeter of TSF

The TSF overlies geological formations of argillite, sandstone, and dolerite. The subsurface soils are residual in nature and decrease in weatherability while increasing in stiffness with depth. Ground water is encountered at an average depth of 3.4m below natural ground level.

The various TSF stages of development and designs have had a Design Engineer or EOR involved. Currently the TSF has an appointed EOR.

The TD stage developments are summarised in the table below.

Stage	Status	Material	Start Elevation (mamsl)	End Elevation (mamsl)
Starter Wall Phase 1 (Old TSF)	Completed	Earthfill	134	141
Starter Wall Phase 2 (Old TSF)	Completed	Earthfill	141	150
Self-raised tailings (Old TSF)	Current	Tailings	150	173.4
Self-raised tailings (Old TSF)	Future	Tailings	173.4	176
Starter Wall (West Ext)	Completed	Earthfill	148	160
Self-raising tailings (West Ext)	Current	Tailings	160	163.6
Self-raising tailings (West Ext)	Future	Tailings	163.6	174

Stage	Status	Material	Start Elevation (mamsl)	End Elevation (mamsl)
Design change includes a waste rock buttress from natural ground level to the 176 mamsl elevation.				

The TSF is equipped with ten turrets (five Old TSF and five West Ext) that decant any supernatant and stormwater runoff arising from the TSF. The TSF is designed to contain the Probable Maximum Precipitation (PMP) event with sufficient freeboard and decanting of the PMP within 7 days.

- 6. A summary of material findings of annual performance reviews and dam safety review (DSR), including implementation of mitigation measures to reduce risk to ALARP (Information may be obtained from output of Requirements 10.4 and 10.5);**

Summary of *Material Findings*³ and Mitigation Measures

Reference	Material Findings Summary	Mitigation Measures to Meet ALARP
2023 EOR Report	No material findings	None
2023 DSR	No material findings	None

- 7. A summary of material⁴ findings of the environmental and social monitoring programme including implementation of mitigation measures (Requirement 7.5);**

No environmental nor social significant material findings from monitoring programs have been reported and recorded in the relevant reporting period.

- 8. A summary version of the tailings facility EPRP for facilities that have a credible failure mode(s) that could lead to a flow failure event that:**

- Informed by credible flow failure scenarios from the tailings facility breach analysis;
- Includes emergency response measures that apply to project affected people as identified through the tailings facility breach analysis and involve cooperation with public sector agencies; and
- Excludes details of emergency preparedness measures that apply to the Operator's assets, or confidential information (Requirements 13.1 and 13.2).

³ Material findings are findings that have a high probability of becoming or actual dam safety issues that require immediate attention and are considered immediately dangerous to life, health or the environment, a significant regulatory enforcement.

⁴ An incident is considered material if it:

a) Causes significant negative impact on human health or the environment;
b) Extends onto publicly accessible land and has the potential to cause significant adverse impact to surrounding communities, livestock or wildlife;
c) Results in a breach of license conditions, the convention between the mine and government, or a violation of environmental regulations and standards or constitute releases above Reportable Quantities (RQs) any of which is immediately reportable to the government by law or other statute; or
d) Results in a release of cyanide (above 0.5 mg/l of WAD cyanide, confirmed by a certified third-party laboratory as above detection limit) to any surface water that leaves the site boundaries or any groundwater aquifer (whether on or off-site).

Purpose and Scope: The Emergency Preparedness and Response Plan (EPRP) provides a predetermined plan of action to be implemented in close coordination with emergency responders in the unlikely case of a dam safety emergency. It defines the roles and responsibilities of all entities involved, prioritizing the saving of lives, reducing damage to property, and minimizing impacts to the environment. The EPRP contains procedures and information to assist in assessing the situation, provide early warnings and identify maps of critical areas in the event of an emergency.

Site data and effects of inundation: A dam breach analysis and inundation study was conducted for Somilo Limited to evaluate the potential downstream impact of hypothetical breaches of the TSF at Loulo Mine. A summary of the human exposure and vulnerability to tailings facility credible flow failure scenarios is provided in Section 4.

Roles and Responsibilities: Loulo Mine has identified the following key roles and responsibilities for emergency planning and response to a dam safety emergency.

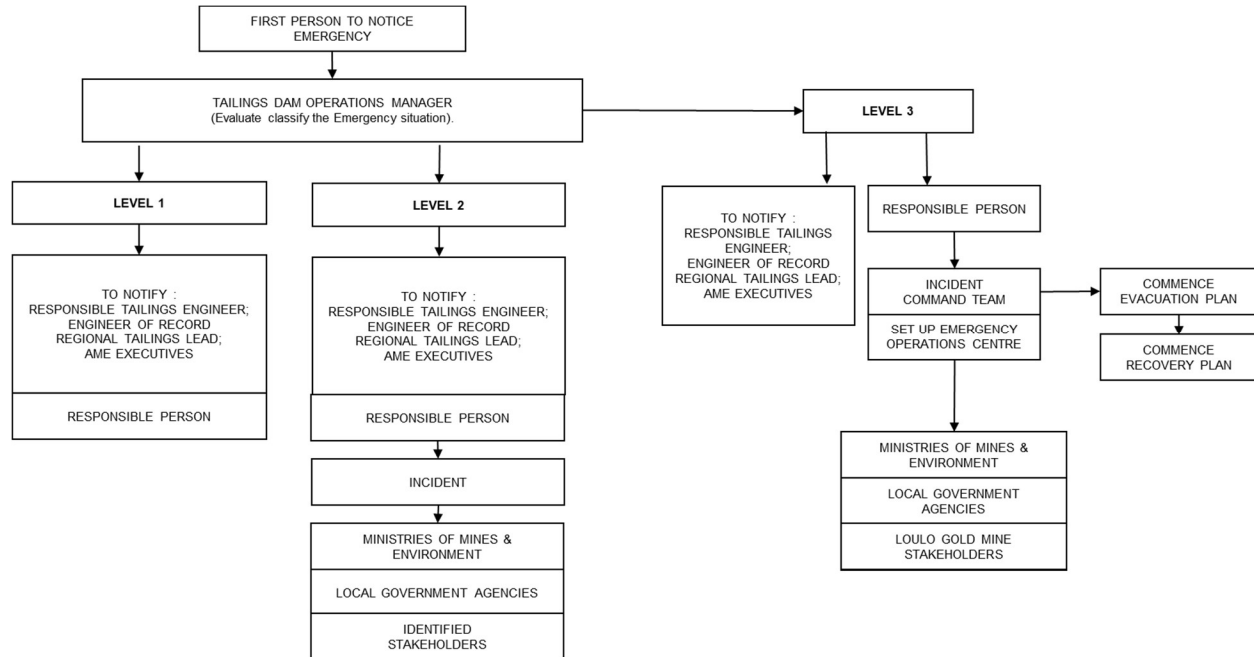
- **Responsible person** – The person appointed as the general manager of Loulo Mine will provide notifications, designate the Incident Command Team (ICT), and establish Emergency Operation Center (EOC) in coordination with Government and Provincial resources.
- **Incident command team** – The team who are responsible for management of the response, will initiate warnings and the evacuation of people within the inundation area. Furthermore, they will notify local agencies to evacuate people and close roads. The ICT will co-ordinate broader response activities until the EOC is setup and able to take over.
- **Emergency operations centre** – Provide comprehensive support for the ICT including coordination of site activities, security, and logistical requirements. The EOC is responsible for ongoing communication with stakeholders and media, technical and administrative support.
- **TSF operations manager** – The person appointed for day-to-day operational activities of the TSF who is familiar with the infrastructure and can mobilize resources of machinery and personnel to perform mitigating controls in the case of a dam safety emergency.

Emergency response, processes, and procedures:

- Loulo Mine has a clearly defined and measurable emergency trigger points that define the transition from a normal operational condition to one that entails an immediate risk of dam failure.
- Besides emergency trigger points there are clear indications to undertake an urgent and targeted inspection. If this inspection identifies an emergency trigger point, the EPRP is activated.
- Potential emergency situations involving the Loulo TSF are classified as follows:

- Level 1 – Conditions do not present an immediate emergency but do require prompt investigation.
- Level 2 – Conditions may present an emergency situation if not resolved but is not imminent.
- Level 3 – Condition is an active or imminent emergency defined by the failure of a significant component of the TSF.

The emergency response process flow is set out below.



Further to the emergency planning Loulo Mine remains in constant engagement with local agencies, first responders and potentially affected community members with regards to TSF major emergency scenarios.

9. Dates of most recent and next independent reviews (Requirement 10.5)

Dates of Independent Reviews

	Latest Review	Previous Review
ITRB Review ⁵	December 2022	August 2021
Dam Safety Review (DSR)	June 2023	N/A

⁵ ITRB: Independent Tailings Review Board

10. Annual confirmation that the Operator has adequate financial capacity (including insurance to the extent commercially reasonable) to cover estimated costs of planned closure, early closure, reclamation, and post-closure of the tailing's facility and its appurtenant structures (Requirement 10.7)

Barrick has sufficient financial resources to meet its business requirements for the foreseeable future, including capital expenditures.

Please refer to Barrick Annual Report 'Financial Position and Liquidity' (page 111) and 'Contractual Obligations and Commitments' table (page 113).

[Barrick Annual Report 2022](#)

C. Provide local authorities and emergency services with sufficient information derived from the breach analysis to enable effective disaster management planning (Information may be obtained from the output of Requirement 2.3).

List of Documents Shared with Local Authorities and Emergency Services

Local Authorities or Emergency Services	Document
Local & Regional government – Kenieba	• TSF Emergency & Communication Plan • Local communities and authorities technical services training on TSF EPRP⁶
Hospital	Training of the major risks of TSF
Civil Protection	The required earthmoving equipment for TSF Dam failure repair
Local Chief Village	Route of Community Evacuation and Restoration process
	List of Community Emergency Response Team members
	Community Emergency Response Team training Schedule

⁶ EPRP: Emergency Preparedness and Response Plan

REQUIREMENT 15.2

- A. Respond in a systematic and timely manner to requests from interested and affected *stakeholders* for additional information *material* to the public safety and integrity of a *tailings facility*. When the request for information is denied, provide an explanation to the requesting *stakeholder*.**

Barrick is committed to the timely response to requests for additional information material to the public safety and integrity of their TSFs from interested and affected stakeholders. In the event that specific information cannot be shared with the requesting stakeholder, an explanation will be provided. Information on Barrick's Tailings Management policy and our Social Performance Policy can be found at the following links:

[Tailings Management Policy](#)

[Social Performance Policy](#)

REQUIREMENT 15.3

- A. Commit to cooperate in credible global transparency initiatives to create standardised, independent, industry-wide and publicly accessible databases, inventories or other information repositories about the safety and integrity of *tailings facilities*.**

Barrick is committed to global transparency around the public safety and integrity of our TSFs. A link to Barrick's Tailings Management Policy can be found here.

[Tailings Management Policy](#)

CAUTIONARY STATEMENT ON FORWARD-LOOKING INFORMATION [LOULO TSF]

Certain information contained in Barrick's Global Industry Standard on Tailings Management ("GISTM") tailings disclosure ("GISTM Disclosure"), including any information as to the design and operation of Barrick's tailings facilities and Barrick's sustainability strategy and vision, projects, plans or future technical, or operating performance constitutes "forward-looking statements". All statements, other than statements of historical fact, are forward-looking statements. The words "target", "plan", "project", "initiate", "estimate", "develop", "potential", "may", "will", "likely", "unlikely", "can", "could", "would" and similar expressions identify forward-looking statements. In particular, this GISTM Disclosure contains forward-looking statements including, without limitation, with respect to: the results of Barrick's annual performance and dam safety reviews and related mitigation measures for the Loulo Tailings Storage Facility, ("Loulo TSF"), the design, storage capacity and lifecycle of the Loulo TSF; the potential environmental and social impacts of the Loulo TSF and related monitoring and risk assessments; the results of Barrick's tailings facility breach analysis and inundation studies including human exposure and vulnerability to flow failure scenarios, disaster management planning and emergency preparedness; and estimated costs associated with the Loulo TSF.

Forward-looking statements are necessarily based upon a number of estimates and assumptions that, while considered reasonable by the company as at the date of this Response in light of management's experience and perception of current conditions and expected developments, are inherently subject to significant business, economic and competitive uncertainties and contingencies. Known and unknown factors could cause actual results to differ materially from those projected in the forward-looking statements and undue reliance should not be placed on such statements and information. Such factors include, but are not limited to: operating or technical difficulties in connection with mining or development activities, including geotechnical challenges, tailings dam and storage facilities failures; physical and transition risks related to climate change, including extreme weather events and resource shortages; risk of loss due to acts of war, terrorism, sabotage and civil disturbances; changes in national and local government legislation, taxation, controls or regulations and/or changes in the administration of laws, policies and practice; expropriation or nationalization of property and political or economic development in Mali or other countries in which Barrick does or may carry on business in the future; timing of receipt of, or failure to comply with, necessary permits and approvals; our ability to maintain relationships with public sector agencies and the communities surrounding the Loulo TSF; contests over access to water, power and other required infrastructure; and disruptions in the maintenance or provision of required infrastructure and information technology systems. In addition, there are risks and hazards associated with the business of mineral exploration, development, and mining, including environmental hazards, industrial accidents, unusual or unexpected formations, pressures, cave-ins and flooding. Many of these uncertainties and contingencies can affect our actual results and could cause actual results to differ materially from those expressed or implied in any forward-looking statements made by, or on behalf of, Barrick. Readers are cautioned that forward-looking statements are not guarantees of future performance.

All of the forward-looking statements made in this GISTM Disclosure are qualified by these cautionary statements. Specific reference is made to the most recent Form 40-F/Annual Information Form on file with the SEC and Canadian provincial securities regulatory authorities for a discussion of some of the factors underlying forward-looking statements and the risks that may affect Barrick's ability to achieve the expectations set forth in the forward-looking statements contained in this Response.

Barrick disclaims any intention or obligation to update or revise any forward-looking statements whether as a result of new information, future events or otherwise, except as required by applicable law.