

GISTM Principle 15 – August 2023 Public Disclosure

Kibali Gold Mine CTSF



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 and 6.4)

The Kibali Cyanide Tailings Storage Dam (CTSF) is in the Haut – Uele district of the Democratic Republic of Congo, 13km Northeast of Watsa. The CTSF is a HDPE lined downstream raised, compacted earth fill or waste rock buttressed facility. Kibali Gold Mines SA (Kibali) is a joint venture company owned in equal proportions of 45%, by Barrick Gold Corporation (Barrick) and AngloGold Ashanti and 10% by Société Miniére de Kilo-Moto (SOKIMO) but operated by Barrick. Barrick currently contracts Paragon Tailings to assist it with the daily operational activities associated with the TSF.

The CTSF has been in operation since September 2013, it currently holds a total volume of 28.3 million tons of Tailings at 894 mamsl. Its final design height of 45,0m (899 mamsl) is with a total storage capacity of 32.4 million tonnes.

2. The Consequence Classification (Requirement 4.1)

Facility Consequence Classification

Facility name	Current Classification	Classification used for Design
CTSF	Very High	Extreme
	December 2020	July 2021



3. A summary of risk assessment findings relevant to the tailings facility (Information may be obtained from the output of Requirement 10.1)

Summary of risk assessment findings from FMEA of April 2021

Reference	Risk driver PFM ¹	Existing	Additional Controls to Meet
		controls	ALARP
2021	Embankment global	InSAR	Undertake geotechnical foundation
FMEA	slope instability –	monitoring	investigation and construct a toe
	potential undrained		buttress if warranted.
	foundation conditions		Installation of inclinometers.

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	In case of dam wall failure from our CTSF, all the	In the event of a
loss	aquatic ecosystems and surrounding forest galleries	dam safety
	could be flooded and impact the diversity of species	emergency, the
	downstream.	Emergency
Community	Some communities downstream in the nearby villages	Preparedness and
	include Gatanga, Makedoniya, Galako Mazo 2,	Response Plan will
	Kotamalembe, Madumbele, Abbarau, Renzo, Gimbya	be initiated. This will
	and Agumazo may be impacted by the inundation.	address the
Cultural	Impact on village cemeteries and archaeological sites	immediate needs of
heritage	as well as sacred sites is envisaged.	communities and
Socio-	Impact on loss of economic activities in some of the	environment.
Economic	nearby villages (as mentioned above) due to	Further, this will be
	inaccessibility to land used for agricultural activities	supported by
	including agricultural fields, livestock and fish farming.	developing and
Human health	In case of dam wall failure, many people may be	implementing
	affected or injured including employees, community	recovery and
	members downstream etc. Other people living	rehabilitation plan.
	downstream experience adverse health conditions, if	
	they come to interact with the contaminated water for	
	domestic use and drinking purpose.	

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

Aspect	Impact Description	Mitigation Measure
Evacuation	Numerous areas may be impacted by the evacuation.	
area	The situation may be exacerbated by poor road	
	conditions making speedy evacuations challenging.	
Community	During an emergency dam failure, the likely impact on	
Infrastructure	basic community infrastructure includes churches, schools, markets, health centre, stadium and bridges, which connect villages with daily supply of goods and services.	

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 CTSF is a HDPE lined downstream raised, compacted earth fill or waste rock buttressed, closed spigotted ring dyke facility. The CTSF shares a common compacted residual soil embankment with the adjacent Float Tailings Storage Facility (FTSF). The CTSF initially comprised two adjacent facilities separated by a ridge. These two facilities are now combined into one single facility, engulfing the ridge between them as they increased in height over time.

The CTSF overlies the geological formation of the Moto greenstone belt, which contains Archean Kibalian volcano sedimentary rocks and ironstone-chert horizons. The volcano-sedimentary sequence comprises sedimentary rocks, a variety of pyroclastic rocks, basaltic flow rocks, mafic-intermediate intrusions, and intermediate-felsic intrusive rocks. The subsurface soils are residual in nature and decrease in weatherability while increasing in stiffness with depth. Ground water is encountered across the site at near surface & 3.0m below natural ground level.

The CTSF has had a Design Engineer or EOR involvement throughout its development. Currently the CTSF has an appointed EOR.

The CTSF stage developments are summarised in the table below.

Stage	Status	Material	End Elevation (mamsl)
CTSF 1 Phase 1	Completed	Earth fill	891.5
CTSF 2 Phase 1	Completed	Earth fill	892
CTSF 1st lift	Completed	Earth fill	895.5
CTSF 2 nd lift	Completed	Waste Rock	899

Water on the CTSF is decanted by a pump mounted skid system with a suction pipe located at the supernatant pool. The FTSF is designed to contain the Probable Maximum Precipitation (PMP) event with sufficient freeboard and decanting of the PMP within 32 days. A CTSF spillway is in construction.



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 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 material³ 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);

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 Kibali Gold Mine Limited to evaluate the potential downstream impact of

² 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.

³ 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).



GISTM Principle 15 – August 2023 Public Disclosure – Kibali Gold Mine – CTSF

Page **6** of **11**

hypothetical breaches of the TD at Kibali Gold Mine. A summary of the human exposure and vulnerability to tailings facility credible flow failure scenarios is provided in Section 4. **Roles and Responsibilities**: Kibali Gold 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 Kibali Gold 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. They will initiate warnings and order evacuation of people within the evacuation 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.

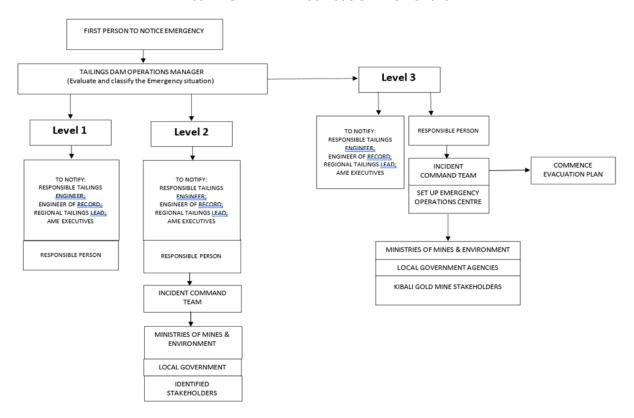
TSF operations manager - The person appointed for day-to-day operational activities of the TSF who is familiar with the infrastructure and can mobilize resources of machinery and personnel to perform mitigating controls in the case of a dam safety emergency.

Emergency response, processes, and procedures: Potential emergency situations involving the Kibali TSF are classified according **to**:

- Kibali Gold 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 Kibali 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.



Kibali TSF EPRP Notification Flowchart:



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

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

Dates of Independent Reviews

	Latest Review	Previous Review
IGRB Review	November – 2022	December – 2021
DSR	June – 2023	N/A

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 tailings facility and its appurtenant structures (Requirement 10.7)

Page **8** of **11**

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
Territorial Administrator (TA)	EPRP
Assistant Territorial Administrator (ATA)	EPRP
Sector Chief (Surur)	EPRP
Local Medical Team	EPRP
Local Red Cross Team	EPRP
Local Environmental services	EPRP
Division chief of Education	EPRP
Groupment Chief	EPRP
Local Development committee	EPRP
Media	EPRP
Civil Society	EPRP

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

Page 10 of 11

CAUTIONARY STATEMENT ON FORWARD-LOOKING INFORMATION [KIBALI CTSF]

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", "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 Kibali's Cyanide Tailings Storage Facility ("CTSF"), the design, storage capacity and lifecycle of the CTSF; the potential environmental and social impacts of the CTSF 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 CTSF.

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 the Democratic Republic of the Congo 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 Kibali's CTSF; 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



GISTM Principle 15 – August 2023 Public Disclosure – Kibali Gold Mine – CTSF

Page **11** of **11**

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.