# GISTM Principle 15 – August 2023 Public Disclosure

Carlin Operations

North Block 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 and 6.4)**

Nevada Gold Mines LLC (NGM), a joint venture between Barrick Gold Corporation (Barrick) and Newmont Corporation (Newmont), owns and operates the North Block Tailings Disposal Facility (NBTDF). The NBTDF is an existing facility, located at the Carlin Operations, approximately 27 miles north of Carlin, Nevada. The intent of this document is to provide clear, concise information about the design, permitting, construction, operation, and ultimate closure of the NBTDF to meet the requirements outlined in the GISTM Principle 15. Principle 15 requires TSF Owners and Operators to "publicly disclose and provide access to information about the tailings facility to support public accountability."

Principle 15, Requirement 1 (15.1) requires the Operator to publish and regularly update information on their commitment to safe TSF management, tailings governance framework implementation, and its organization-wide policies, standards, or approaches to TSF design, construction, monitoring, and closure. The following sections provide the information requested in the Standard.

The NBTDF TSF is described by the following details:

- **Facility Operational Status**: Active
- **Location**: Goldstrike mine site, approximately 27 miles north of Carlin, Nevada
- **Expansion methods**: Staged, downstream construction methods
- **Embankment Type**: Utilizes zoned earth fill / waste rock fill embankment, enclosing the north, west, and south sides of the facility. Natural topography to the east forms the remaining tailings containment.
- **Basin**: The impoundment and upstream embankment slopes are continuously lined with 60-mil high-density polyethylene (HDPE) or 60-mil linear low-density polyethylene (LLDPE) geomembrane
- **Deposition start and expected end (year)**: 1994-2026
- **Tailings Storage Capacity**: 280 M tonnes, 265 M tonnes currently stored.
- **Current Permitted impoundment**: Dam is permitted and constructed through Stage 12.
- **Current Maximum Embankment Height**: 145 m

- **Ultimate Stage 12 Maximum Embankment Height**: 145 m to elevation 1806 m.
- **Supernatant Pool Configuration**: The TSF includes an underdrain system, consisting of two basin underdrains and a series of finger drains, placed above the liner to mitigate seepage and promote tailings consolidation. Collected solution is conveyed through the embankment in collection pipes installed in the NBTDF's southwest corner. The collected solution is transferred to the NBTDF Seepage Collection Sump where it is pumped back to the NBTDF's supernatant pond.
- **Long-term closure plan**: Side slopes of NBTDF will be sloped, covered, and seeded to their final closure configuration. After tailings deposition has ceased and sufficient drain down has occurred, the facility will be capped, covered, and seeded to form a stable landform. Once the cover is complete a spillway will be developed to route meteoric water off the facility.

## 2. The Consequence Classification (Requirement 4.1)

The NBTDF was assigned an initial Dam Failure Consequence Classification (DFCC) of "Very High" by NGM and the NBTDF Engineer of Record (EoR) based on the results of an Initial Failure Modes and Effects Analysis (FMEA). The FMEA results were used to update NBTDF dam breach and downstream inundation analyses, which were completed by the EoR. The DFCC was then upgraded by NGM and the EoR to "Extreme".

**Facility Consequence Classification**

| Current Classification | Classification used for Design |
|---|---|
| Extreme (GISTM 2020) | Extreme (GISTM 2020) |

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

The NBTDF Risk Assessment was updated in July 2023 and the risk drivers summarized in the table below were identified along with additional controls to be implemented for the facility ensure the risk level is as low as reasonably practicable (ALARP).

| Reference | Risk driver PFM[1] | Existing Controls | Additional Controls to Meet ALARP |
|---|---|---|---|
| 2023 RA | Northwest Corner Foundation displacement under | Regular inspections, Instrumentation, InSAR, construction methods. | Construct buttress (2023-2024) to mitigate |

[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

| Reference | Risk driver PFM[1] | Existing Controls | Additional Controls to Meet ALARP |
|---|---|---|---|
| | static or seismic loading. | | post-earthquake movement. |
| 2023 RA | West Leg Foundation displacement under static or seismic loading due to an unidentified weak layer | Regular inspections, instrumentation, InSAR, construction method | Complete geotechnical investigation and characterization of foundation materials. |

**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)**

The most recent TSF Risk Assessment identified two key risk drivers and the updated dam breach and inundation study for those credible scenarios are under evaluation. The assessment of human exposure and vulnerability was completed utilizing information from previous dam breach and inundation studies and Emergency Action Plans (EAP). The downstream impacts identified from a worst-case hypothetical failure mode which results in a highly unlikely catastrophic dam breach are summarized below.

**Summary of Potentially Material Impacts**

| Aspects | Impact description | Mitigation Measure(s) |
|---|---|---|
| Environmental | Tailings and water released into Bell Creek and Rodeo Creek. Sedimentation impacts to ephemeral streams would impact water quality until cleanup was completed. The potential area of impact could be as large as 20 km2. | Relocation of supernatant pond from impoundment ‘s southwest corner to northeast. Buttress construction in NW corner of facility. |
| Public Infrastructure | The unlikely losses to recreational facilities and infrequently used transportation routes within the potential inundation area would be temporary as this facility is not expected to have off-site impacts. | Regular TSF inspection and monitoring data review. Emergency Action Plans to provide warning. |
| Health, Social, & Cultural | Within the potential inundation area, there are no known community welfare or assets, significant disruption of business, service or social dislocation are unlikely, and there are no known heritage sites, cultural resources, significant recreational, or community assets within the potential inundation area. | None |

| Aspects | Impact description | Mitigation Measure(s) |
|---|---|---|
| Economic | The unlikely losses to recreational facilities and infrequently used transportation routes within the potential inundation area would be temporary as this facility is not expected to have off-site impacts. | Regular TSF inspection and monitoring data review. Emergency Action Plans to provide warning. |

**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 NBTDF is a sidehill TSF utilizing a zoned waste rock embankment, enclosing the north, west, and south sides of the facilities footprint. The NBTDF's original design included five construction stages, Later design modifications increased the design to 12 construction stages.

All stages of the embankment construction utilize the downstream method. The impoundment and upstream embankment slopes are lined with a continuous geomembrane liner underlain by a low permeability soil (through Stage 7) or a geosynthetic clay liner (GCL) (staring with Stage 8 embankment construction). Tailings consolidation water is collected by a series of over-liner drains (blanket and finger drains) that drain by gravity in collection pipes that pass through the embankment's southwest corner. Tailings deposition involved sub-aerial techniques to maintain a minimal supernatant pond in the southwest corner of the TSF through Stage 10 operations. During Stage 11 operations, tailings deposition was modified to move the supernatant pond from the southwest corner to the northeast corner.

The underlying geology of the facility consists of 30 or more meters of Tertiary Carlin formation, a geologic unit comprised of loosely cemented sand, silts, gravels, volcanic tuffs, and clays. At depth underlying the Carlin formation, are Devonian aged limestones and siltstones.

During operations, investigation of the surrounding geology located an anomalous section of the Carlin Formation in the South Leg embankment's foundation. This area was identified as a weak clay unit and designated as "Soft Zone" material. The Soft Zone material characteristics led to the construction of a buttress along the NBTDF's southern toe of the NBTDF to ensure long-term stability. Additional investigations completed during operations identified the presence of "Soft Zone" material in the NBTDF Northwest Corner. Detailed investigation and testing were completed to identify the "Soft Zone" extents and characterize its strength properties. Slope stability modeling indicated an additional buttress should be constructed on the Northwest Corner to ensure long-term stability. Engineering and construction of the Northwest Corner Buttress is underway.

Each stage of the tailing facility has been engineered and the design and construction of the facility was overseen by a qualified engineer and the appointed Engineer of Record.

The NBTDF is a zero-discharge facility with no constructed spillway. An upstream diversion channel conveys stormwater around the facility. Flood storage capacity in excess of the probable maximum flood currently exists in the facility.

The construction history of the facility is summarized in the table below.

| Construction Stage | Completion Date | Crest Elevation (m) | Significant Design Changes |
|---|---|---|---|
| Stage 1 | 1994 | 1702.3 | Facility fully lined with 60-mil HDPE liner instead of lining in southwest corner only |
| Stage 2 | 1996 | 1710.2 | Additional blanket underdrain connected to Drainage Collection Sump |
| Stage 3 | 1998 | 1720.6 | Sloping drainpipes included at the barge ramp |
| Stage 4 | 1999 | 1731.3 | Design through Stage 9 approved and implemented |
| Stage 5 | 2001 | 1742.2 | None |
| Stage 6 | 2004 | 1753.2 | None |
| Stage 7 | 2006 | 1764.2 | Switched from HDPE to LLDPE primary liner;<br><br>Discontinued geotextile between seal zone and mine waste (Zone A) |
| Stage 8 | 2008 | 1775.2 | Adjusted to new liner system consisting of LLDPE geomembrane underlain by geosynthetic clay liner panels. Compacted low permeability soil layer switched to fine material fill “buffer zone” due to lack of low permeability on-site availability. |
| Stage 9 | 2012 | 1784.0 | Changed downstream embankment slopes to 1.5H:1V; |
| Stage 10 | 2017 | 1789.2 | Increase embankment height and reduce embankment crest width to fully construct the Stage 10 embankment within the existing embankment crest |
| Stage 11 | 2020 | 1794.4 | North Embankment constructed through Stage 12, with a ramp extending to the Stage 11 west embankment. |
| Stage 12 | Q3 2023 (in progress) | 1805.9 | Water pool relocated from southwest corner to northeast corner; Tailings distribution and reclaim pipelines established to allow tailings from both Roaster and Autoclave to be deposited; Reclaim |

| | | | |
|---|---|---|---|
| | | | ramp constructed in northeast corner to reclaim water to both Roaster and Autoclave facilities. |

**6. A summary of material[2] 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);**

The NBTDF is inspected annually by the EoR, and recommendations are provided in an annual DSI Report. A Dam Safety Review (DSR) is conducted every five years by an independent engineer with the last DSR conducted in 2019. NGM maintains a database to track findings, recommendations, and actions arising from each of these reviews as well as progress toward addressing the findings. Material findings from the DSI and DSR are summarized below.

| Source | Material Finding | Mitigation Measures |
|---|---|---|
| 2019 DSR | Evaluate the effects of static and seismic loading on the foundation in the northwest corner of the facility and evaluate options for buttressing. | Additional stability analyses were completed using updated strength relationships for Soft Zone material completed. Embankment loading history modeled to assess stresses through construction. Results utilized to design the Northwest Corner Buttress.<br><br>Northwest corner buttress construction underway. |

**7. A summary of material[3] findings of the environmental and social monitoring programme including implementation of mitigation measures (Requirement 7.5)**

No material Environmental and Social Incidents have been reported for this facility over for the period 2022 to date of publication.

**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:**

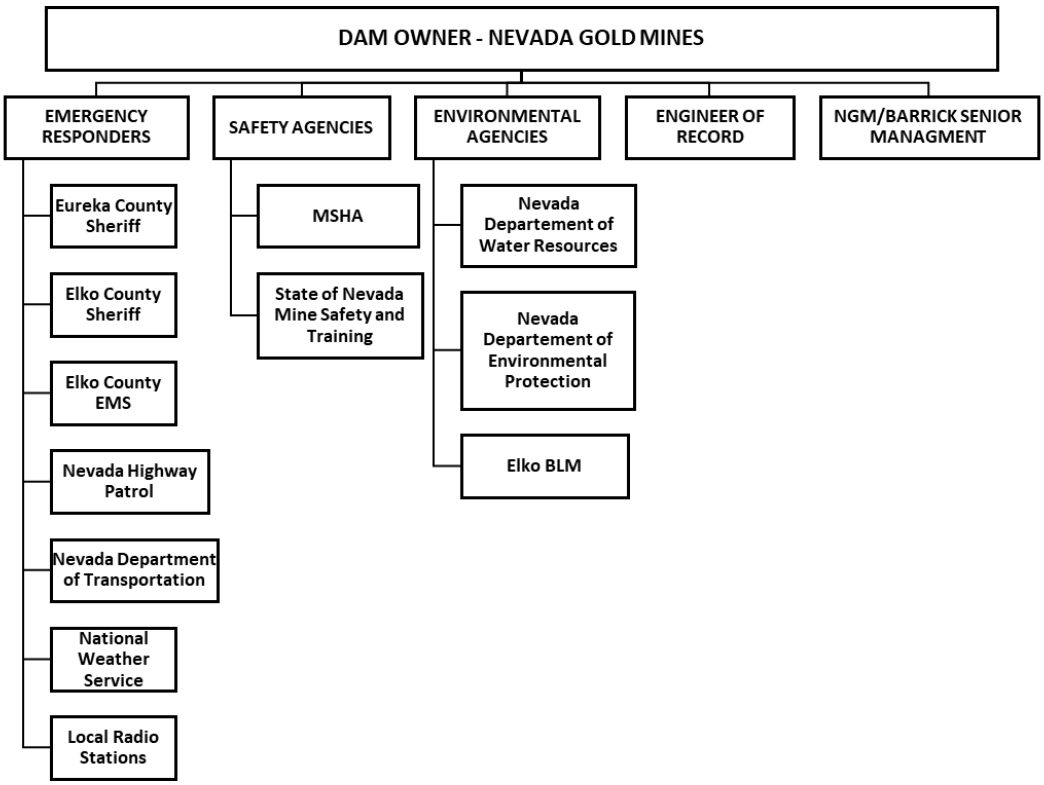
- informed by credible flow failure scenarios from the tailings facility breach analysis;

[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).

- 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).

An Emergency Action Plan (EAP) has been developed specifically for the NBTDF to meet regulatory requirements as set forth by the Nevada Division of Water Resources (NDWR) Dam Safety Program. The EAP describes procedures for reporting and responding to a wide range of potential adverse events at the NBTDF and includes a notification flowchart to ensure stakeholders and responders are informed promptly and engaged in event response. The EAP is a subset of an overall, site-wide Emergency Preparedness and Response Plan (EPRP) developed and maintained for the Carlin Operation. The EAP and EPRP are both reviewed annually and updated as necessary to reflect changes in site conditions by NGM's responsible personnel, available resources, and contractors who may be engaged in an emergency response.

**EMERGENCY NOTIFICATION FLOWCHART**



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

NGM has an IGRB in place to regularly review the Operator's and EoR's work with regard to design, construction, operation, and closure of the NBTDF. The discussions held between the ITRB, NGM, and the EoR and the IGRB's recommendations from each review meeting are summarized in a report or memorandum issued by the IGRB to NGM.

NGM engages an independent engineering firm to complete a DSR for the NBTDF every five years as per the Barrick Tailings Management Standard. The most recent DSR was completed in 2019. The next DSR will be completed in 2024.

| Review Type | Latest Review | Previous Review |
|---|---|---|
| IGRB | September 2022 | August 2021 |
| DSR | May 2019 | None |

**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)**

NGM has adequate financial capacity to cover estimated costs of the TSF's and appurtenant structures' planned closure, early closure, reclamation, and post-closure monitoring and maintenance. Demonstration of financial assurance is required by regulatory authorities, including the Bureau of Land Management (BLM), Nevada Division of Environmental Protection (NDEP), and Nevada Division of Water Resources (NDWR). Closure cost estimates are reviewed on a regular basis to ensure all costs are properly accounted for and adjusted for inflation.

Triennially, the reclamation bond is required to be updated for any changes made to the mine or reclamation plan of the facility. NGM and Barrick confirm that NGM has adequate financial capacity to reclaim and close the NBTDF at any point in the facility's life cycle to achieve the long-term passive closure requirements defined by GISTM and regulatory requirements with the State of Nevada.

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

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**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)**

An EAP has been developed for the NBTDF to meet permitting requirements through the Nevada Division of Water Resources. The EAP outlines emergency response procedures to be implemented during various identified emergencies and has been shared with local authorities. The EAP is reviewed and updated annually.

| Local Authority or Emergency Services | Document |
|---|---|
| Bureau of Land Management | EPRP (EAP) – Provided annually |
| Nevada Division of Water Resources | EPRP (EAP) – Provided annually |
| Nevada Division of Environmental Protection | EPRP (EAP) – Provided annually |
| Nevada Department of Emergency Management | EPRP (EAP) – Provided annually |
| Nevada Highway Patrol | EPRP (EAP) – Provided annually |
| National Weather Service | EPRP (EAP) – Provided annually |
| Eureka County Sheriff | EPRP (EAP) – Provided annually |
| Elko County Sheriff | EPRP (EAP) – Provided annually |

**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 [CARLIN NBTDF]

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", "develop", "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 the Carlin Operations' North Block Tailings Disposal Facility ("NBTDF"), which is operated by Nevada Gold Mines ("NGM"), a joint venture between Barrick and Newmont Corporation; the design, storage capacity and lifecycle of NBTDF; the potential environmental and social impacts of NBTDF 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 NBTDF.

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; political or economic development in Nevada, the United States, or other states and 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 NBTDF; contests over access to water, power and other required infrastructure; risks associated with working with partners in jointly controlled assets; 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.