## Environmental and Biodiversity Performance Standards



## $1^{\text {st }}$ MARCH 2024

Final Version

| Revision | Approved | Date | Description |
| :---: | :---: | :---: | :--- |
| Final | Ken Jones | $17^{\text {th }}$ August 2014 | Original 2014 issue of the B2Gold Environmental and <br> Biodiversity Performance Standards |
| Final | Ken Jones | $24^{\text {th }}$ May 2018 | 2018 revision, update and issue of the original 2014 B2Gold <br> Environmental and Biodiversity Performance Standards |
| Final | Ken Jones | $1^{\text {st }}$ March 2024 | 2024 revision, update and issue of the 2024 B2Gold <br> Environmental and Biodiversity Performance Standards |

# KEY ADDITIONS AND AMENDMENTS WITHIN THE MARCH 2024 B2GOLD ENVIRONMENTAL AND BIODIVERISTY PERFORMANCE STANDARDS UPDATE 

| Section Reference | New Section Reference | Description of the March 2024 Addition or Amendment |
| :---: | :---: | :---: |
| All B2Gold Environmental and Biodiversity Performance Standards | NA | The March 2024 B2Gold Environmental and Biodiversity Performance Standards were reviewed and updated to improve clarity and grammar for improved understanding by B2Gold site personnel. |
| Terms and Definitions | NA | As required, the inclusion of additional environmental terms and definitions. |
| Std 1 - Hazardous Materials and Dangerous Goods Management Section 1.2.5 - Secondary Containment | Section 1.2.5 | Addition - Clean roof-top water shall be diverted away from facilities used to drain and treat contaminated water on-site. |
| Std 1 - Hazardous Materials and Dangerous Goods Management Section 1.2.5 - Secondary Containment | Section 1.2.5 | Addition - Secondary containment shall be free of stored rainfall, spillage and/or other materials (including sediment) to maintain containment capacity. |
| Std 1 - Hazardous Materials and Dangerous Goods Management Section 1.2.11-Mercury | Section 1.2.11 | Addition - Sites shall not use mercury to extract gold in their processing facilities nor accept gold produced by third parties using mercury (RGMP Principle 8.4). <br> Addition - Where applicable, sites shall support government initiatives to reduce and eliminate the use of mercury by artisanal and small-scale miners (ASM). (RGMP Principle 3.3). |
| Std 1 - Hazardous Materials and Dangerous Goods Management Section 1.2.13-Training | Section <br> 1.2.13 | Withdrawal - Prescriptive training requirements previously in Section 1.2.13 Training have been withdrawn in favour of providing risk specific training applicable to Hazardous Materials and Dangerous Goods Management. |
| Std 1 - Hazardous Materials and Dangerous Goods Management -1.2.14-Audits and Inspections | $\begin{gathered} \text { Section } \\ 1.2 .14 \end{gathered}$ | Amendment - The interval for scheduling and conducting third-party safety and environmental audits of supplier hazardous materials and dangerous goods transportation was increased from three to five years. |
| Std 2 - Cyanide Management Section 2.2.3-Cyanide Risk Management | Section 2.2.3 | Addition - B2Gold sites shall identify and manage potential risks relating to the transportation, handling, storage and disposal of all hazardous materials. Sites shall ensure that their arrangements for the transport, storage, use and disposal of cyanide are in line with the standards of practice set out in the International Cyanide Management Code (RGMP Principle 8.3). |
| Std 2 - Cyanide Management - All Sections | All sections | Additions and Amendments - This Standard requires an increased level of conformance with the updated June 2021 version of the International Cyanide Management Code. Previous requirements were defined in the former May 2018 B2Gold Standard, which referenced the former January 2011 version of the Code. |
| Std 2 - Cyanide Management Section 2.2.4 - Handling and Storage | Section 2.2.4 | Amendment - The content within Section 2.2.10 Unloading, Storage and Mixing Facilities was incorporated into Section 2.2.4 Handling and Storage. |
| Std 2 - Cyanide Management Section 2.2.7-Cyanide Transport | $\begin{gathered} \text { Section } \\ 2.2 .7 \end{gathered}$ | Addition - Cyanide transport requirement from Section 2.1 - Mining Standard of Practice. |
| Std 2 - Cyanide Management Section 2.2.9 - Emergency Response (new section) | Section 2.2.9 | Addition - New section on cyanide emergency response. |
| Std 2 - Cyanide Management Section 2.2.10 - Training and Communication (new section) | Section 2.2.10 | Addition - New section on cyanide training and communication. |
| Std 3 - Tailings Management - All relevant sections | Relevant sections | Additions and Amendments - Throughout this Standard, inclusion of key requirements, improved alignment and cross-referencing with the |


| Section Reference | New Section Reference | Description of the March 2024 Addition or Amendment |
| :---: | :---: | :---: |
|  |  | B2Gold Tailings Management Procedure (March 2021), inclusive of key requirements specified by the Mining Association of Canada (MAC). |
| Std 3 - Tailings Management Section 3.2.2 - Integrated Knowledge Base | $\begin{gathered} \text { Section } \\ 3.2 .2 \end{gathered}$ | Addition - ICMM - Section 2 - Integrated Knowledge Base within the Global Industry Standard on Tailings Management (August 2020). |
| Std 3 - Tailings Management Section 3.2.3-Risk Assessment | $\begin{gathered} \text { Section } \\ 3.2 .3 \end{gathered}$ | Addition - Mining Association of Canada - Section 4.1 - Risk Management within the Guide to the Management of Tailings Facilities Version 3.2 (March 2021). |
| Std 3 - Tailings Management Section 3.2.3-Risk Assessment and Hazard Classification | Section 3.2.3 | Addition - Requirement for the completion of a dam break analysis and use of Trigger Action Response Plans (TARPs) for TSFs. |
| Std 3 - Tailings Management Section 3.2.3-Risk Assessment and Hazard Classification | Section 3.2.3 | Addition - Inclusion of Hazard Classification requirements defined in Section 8.2.3-Design Criteria of the 2021 B2Gold Tailings Management Procedure. |
| Std 3 - Tailings Management Section 3.2.5-Communications | Section 3.2.5 | Addition - Mining Association of Canada - Section 4.11 Communication within the Guide to the Management of Tailings Facilities Version 3.2 (March 2021). |
| Std 3 - Tailings Management Section 3.2.6-Management and Governance | $\begin{gathered} \text { Section } \\ 3.2 .6 \end{gathered}$ | Addition - Mining Association of Canada - Principle 9 - Appoint and empower an Engineer of Record, within the Guide to the Management of Tailings Facilities Version 3.2 (March 2021). |
| Std 3 - Tailings Management Section 3.2.7 - Design and Construction | Section 3.2.7 | Addition - ICMM - Principle 4 - Develop plans and design criteria for the tailings facility, within the Global Industry Standard on Tailings Management (August 2020). |
| Std 3 - Tailings Management Section 3.2.8 Resources | $\begin{gathered} \hline \text { Section } \\ 3.2 .8 \end{gathered}$ | Addition - Mining Association of Canada - Section 4.9 - Resources, within the Guide to the Management of Tailings Facilities Version 3.2 (March 2021). |
| Std 3 - Tailings Management - 3.2.9 Operation of TSFs | Section 3.2.9 | Amendment - The minimum factor of safety of 1.4 was amended to 1.5 for static. A minimum factor of safety of 1.1 was included for post peak (post-liquefaction) conditions. |
| Std 3 - Tailings Management - 3.2.9 Operation of TSFs | Section 3.2.9 | Addition - To prevent the uncontrolled release of tailings supernatant and to withstand the surface run-off from the Inflow Design Flood (IDF). The Annual Exceedance Probability (AEP) of the IDF is function of the dam classification as summarized in Table 8.2 of the 2021 B2Gold Tailings Management Procedure. |
| Std 3 - Tailings Management Section 3.2.10-Tailings Operations, Maintenance and Surveillance Manual | $\begin{gathered} \text { Section } \\ 3.2 .10 \end{gathered}$ | Additions and Amendments - Inclusion of Tailings Operations, Maintenance and Surveillance Manual requirements defined in Section 9.2 - OMS Manual of the 2021 B2Gold Tailings Management Procedure. |
| Std 3 - Tailings Management Section 3.2.17-Emergency Prevention, Preparedness, Response and Recovery | Section 3.2.17 | Addition - ICMM - Principles 13 and 14 - Prepare for emergency response and prepare for long term recovery, within the Global Industry Standard on Tailings Management (August 2020). |
| Std 3 - Tailings Management Section 3.2.18 - Inspection and Audit and 3.2.19-Dam Safety Review | Section 3.2.18 and 3.2.19 | Addition - Addition of relevant sections relating to Section 3.2.18 Inspection and Audit and 3.2.19 - Dam Safety Review of the 2021 B2Gold Tailings Management Procedure. |
| Std 4 - Waste Rock Management Relevant sections | Relevant sections | Addition - Throughout this Standard, inclusion of key requirements of the B2Gold Waste Rock Dump Construction Guidelines for Stable and Non-Polluting Landforms (June 2021). |
| Std 5 - Non-process Waste Management | Relevant sections | Amendments - For most of this Standard, minor wording and grammatical changes only. |
| Std 5 - Non-process Waste Management - 5.2.4 - Incinerator Use | Section 5.2.4 | Addition - New section on incinerator use. |


| Section Reference | New Section Reference | Description of the March 2024 Addition or Amendment |
| :---: | :---: | :---: |
| Std 5 - Non-process Waste Management - 5.2.6-Overseas Shipment of Hazardous Waste | $\begin{gathered} \text { Section } \\ 5.2 .7 \end{gathered}$ | Addition - New section relating to the overseas shipment of hazardous waste and the Basel Convention. |
| Std 6 - Water Management - 6.2.1 Regulatory Requirements | Section 6.2.1 | Addition - Inclusion of RGMP Principle 10.1- Water Efficiency. |
| Std 6 - Water Management - 6.2.2Water Management Strategy | $\begin{gathered} \hline \text { Section } \\ 6.2 .2 \end{gathered}$ | Addition - Inclusion of specific B2Gold Global Water Strategy requirements. |
| Std 6 - Water Management - 6.2.3 Water Management Plan and Water Balance | $\begin{gathered} \text { Section } \\ 6.2 .3 \end{gathered}$ | Addition - Inclusion of specific B2Gold Global Water Strategy requirements. |
| Std 6 - Water Management - 6.2.7 Stormwater and Erosion and Sediment Control Structures | $\begin{aligned} & \text { Section } \\ & 6.2 .7 \end{aligned}$ | Addition - Inclusion of RGMP Principle 10.2-Water access and quality. |
| Std 7 - Air Quality Management 7.2.1 | NA | Minor wording and grammatical changes only. |
| Std 8 - Mine Closure Planning Relevant sections | Title | Amendment - Amendment of the title of the Standard from "Closure and Reclamation Planning" to "Mine Closure Planning". |
| Std 8 - Mine Closure Planning Relevant sections | Relevant sections | Addition - Throughout this Standard, inclusion of key requirements of the ISO 21795-1:2021 Standard - Mine closure and reclamation planning - Part 1. <br> Note - B2Gold sites shall be aware that the changes to Standard 8 were significant and too numerous to list within this table. |
| Std 8 - Mine Closure Planning Introduction | Introductio $\mathrm{n}$ | Addition - Inclusion of RGMP Principle 9 - Biodiversity, land use and mine closure, Section 9.4 - Mine Closure. |
| Std 8 - Mine Closure Planning Section 8.2.12 - Mine Closure Plan Review and Update | $\begin{gathered} \text { Section } \\ 8.2 .12 \end{gathered}$ | Addition - Inclusion of relevant requirements of the ISO 21795-1:2021 <br> Standard - Mine closure and reclamation planning - Part 1. |
| Std 8 - Mine Closure Planning - <br> 8.2.15 - Long-term post-closure and reclamation | $\begin{gathered} \text { Section } \\ 8.2 .15 \end{gathered}$ | Addition - Inclusion of relevant requirements of the ISO 21795-1:2021 Standard - Mine closure and reclamation planning - Part 1. |
| Std 9 - Progressive Reclamation | Title | Amendment - Amendment of the title of the Standard from "Topsoil and Reclamation Management" to "Progressive Reclamation". |
| Std 9 - Progressive Reclamation | Relevant sections | Addition - Inclusion of relevant requirements of the ISO 21795-1:2021 Standard - Mine closure and reclamation planning - Part 1. |
| Std 9 - Progressive Reclamation 9.2.2 Management of Topsoil and Subsoils | $\begin{gathered} \text { Section } \\ 9.2 .2 \end{gathered}$ | Amendment - Requirements previously applicable to soil management (Sections 9.2.2 to 9.2.6) were collated into Section 9.2.2 Management of Topsoil and Subsoils |
| Std 9 - Progressive Reclamation 9.2.4 Progressive Reclamation Plan | $\begin{gathered} \text { Section } \\ 9.2 .4 \end{gathered}$ | Addition - Minimum requirements to be included within site Reclamation Plans are defined in Section 9.2.4 - Progressive Reclamation Plan. |
| Std 9 - Progressive Reclamation - <br> 9.2.6 - Progressive Reclamation | $\begin{gathered} \text { Section } \\ 9.2 .6 \end{gathered}$ | Addition - The requirement that reclamation shall be conducted as soon as practicable on land that is no longer needed for current or future operational requirements, in conformance with the site Reclamation Plan. |
| Std 9 - Progressive Reclamation - <br> 9.2.6 - Progressive Reclamation | $\begin{gathered} \text { Section } \\ 9.2 .6 \end{gathered}$ | Addition - The requirement for progressive reclamation to be budgeted, scheduled and conducted on an "annual" basis is defined in Section 9.2.6 - Progressive Reclamation. |
| Std 10 - Noise and Vibration Management - Relevant Sections | Relevant sections | Minor wording and grammatical changes only. <br> Addition - Inclusion of RGMP Principle 8.5 - Noise and dust and related concepts. |
| Std 11 - Biodiversity Management Introduction | Relevant sections | Additions and Amendments - Major additions and amendments relating to a) Priority Biodiversity Values (PBVs); b) required changes to |


| Section Reference | $\begin{array}{c}\text { New } \\ \text { Section } \\ \text { Reference }\end{array}$ | Description of the March 2024 Addition or Amendment |
| :--- | :---: | :--- |
|  |  | $\begin{array}{l}\text { the content of Biodiversity Management Plans; c) required changes to } \\ \text { Biodiversity mitigation measures (controls); d) } \\ \text { Note - B2Gold sites shall be aware that the changes to Standard 11 were } \\ \text { significant and too numerous to list within this table. }\end{array}$ |
| $\begin{array}{l}\text { Std 11 - Biodiversity Management - } \\ \text { Introduction }\end{array}$ | $\begin{array}{l}\text { Relevant } \\ \text { sections }\end{array}$ | $\begin{array}{l}\text { Minor wording and grammatical changes only. } \\ \text { Addition - Inclusion of RGMP Principle 9.1 - Biodiversity. }\end{array}$ |
| $\begin{array}{l}\text { Std 11 - Biodiversity Management - } \\ \text { Section 11.2.7 - Pest, Weed and } \\ \text { Invasive Alien Species Management }\end{array}$ | $\begin{array}{c}\text { Section } \\ 11.2 .7\end{array}$ | $\begin{array}{l}\text { Addition - Inclusion of additional requirements applicable to } \\ \text { translocation of wildlife. }\end{array}$ |
| $\begin{array}{l}\text { 11.2.8 Biodiversity Compensation of } \\ \text { Critical Habitat }\end{array}$ | $\begin{array}{c}\text { Section } \\ 11.2 .8\end{array}$ | $\begin{array}{l}\text { Addition - Addition of a new Section 11.2.8 - Biodiversity Compensation } \\ \text { of Critical Habitat. }\end{array}$ |
| $\begin{array}{l}\text { Std 12 - Climate Change and Energy } \\ \text { Management }\end{array}$ | $\begin{array}{c}\text { New 2024 } \\ \text { Standard }\end{array}$ | $\begin{array}{l}\text { New Standard - New 2024 B2Gold Environmental and Biodiversity } \\ \text { Performance Standard. Incorporates the key requirements applicable to: } \\ \text { - 2019 RGMP - Principle 10.3 - Combating climate change and Principle } \\ 10.4 ~-~ E n e r g y ~ e f f i c i e n c y ~ a n d ~ r e p o r t i n g ~\end{array}$ |
| - Task Force on Climate-related Financial Disclosures (TCFD) (2017) |  |  |$\}$| - B2Gold Climate Strategy Report (February 2022). |
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## INTRODUCTION

## PURPOSE

The purpose of these 2024 B2Gold Environmental and Biodiversity Performance Standards is to provide all B2Gold operating sites with a clear understanding of the Company's expectations in relation to the minimum standards to be met, to consistently and effectively manage the key risks associated with the environment and effects on biodiversity across the locations within which B2Gold operates.
These Environmental and Biodiversity Performance Standards provide the framework to assist B2Gold sites to:

- achieve a high level of operational control for the management of common environmental and biodiversity risks across the organization
- improve consistency in environmental and biodiversity management across all sites
- identify, assess, control and reduce environmental and biodiversity risks and impacts
- reduce the probability of significant environmental incidents occurring
- improve the environmental performance of all sites
- retain company and operational knowledge
- increase compliance to relevant environmental regulatory requirements and other obligations
- assist all sites to demonstrate duty of care and due diligence processes.

These Environmental and Biodiversity Performance Standards are supported by other B2Gold Corporate Health, Safety, and Environmental (HSE) Policies and Standards, which together form the basis for B2Gold's HSE Management System (HSE MS); the key elements of which are shown in Figure 1.

## SCOPE

The requirements outlined within these Environmental and Biodiversity Performance Standards apply to the following B2Gold sites:

- Masbate (Philippines)
- Fekola (Mali)
- Otjikoto (Namibia)

The requirements outlined within this document apply to all of the following (i.e., these are included in the scope of these Environmental and Biodiversity Performance Standards):

- operating sites
- satellite mines
- near mine exploration that reports to an operating mine or satellite mine (i.e., exploration that reports to a B2Gold site that falls within the scope of these Standards).
The requirements outlined within this document do not apply to the following and these are excluded from the scope of these Environmental and Biodiversity Performance Standards':
- exploration that does not report to a B2Gold site that falls under the scope of these Standards (i.e., typically regional exploration)
- sites undergoing decommissioning and closure
- legacy sites
- construction sites
- sites under care and maintenance;
- Joint Venture sites (non-management roles)
- relinquished sites
- non-active sites
- B2Gold Vancouver Corporate office, except where explicitly stated.


## APPLICATION

These 2024 B2Gold Environmental and Biodiversity Performance Standards shall be used and implemented by all B2Gold sites as defined within the scope of this document outlined on the previous page.

The key content, application and requirements of these Environmental and Biodiversity Performance Standards shall be communicated to any newly employed line manager (supervisor and above) through a formal induction so that all requirements are clearly understood and acknowledged.

By formally implementing the requirements specified in these Environmental and Biodiversity Performance Standards, B2Gold aims to improve the performance of its operating sites and quality of receiving environments (air, water, noise, soil), inclusive of reducing the potential for environmental incidents.

B2Gold shall ensure that environmental responsibility is at the core of how it works. This will include implementing and maintaining systems to monitor and manage impacts on the environment. At a site level, B2Gold shall avoid, minimize, mitigate or compensate for significant adverse impacts on the environment relating to its activities.

## 2024 REVISION AND UPDATE

Since the issue of the 2018 B2Gold Environmental and Biodiversity Performance Standards, B2Gold has become a signatory to the World Gold Council - Responsible Gold Mining Principles. Numerous additional external obligations now apply to the organisation, inclusive of relevant International Council on Mining and Metals (ICMM) and Mining Association of Canada requirements.

As a result, the 2024 revision and update to the B2Gold Environmental and Biodiversity Performance Standards included key content and requirements applicable to the following:

1. World Gold Council - Responsible Gold Mining Principles (2019)
2. B2Gold Environmental Strategic Plan (2023 to 2025)
3. B2Gold Water Risk Assessment and Water Risk Statement (2022)
4. B2Gold Water Accounting Framework (WAF)
5. ICMM Water Reporting Good Practice Guide (2021)
6. B2Gold Strategy for Managing Climate Risk (2022)
7. Mining Association of Canada (MAC) Guide to the Management of Tailings Facilities (2021)
8. Mining Association of Canada (MAC) - Additional Environment Protocols/Frameworks
9. ICMM Global Industry Standard on Tailings Management (2020)
10. B2Gold Waste Rock Management Guideline (2021)
11. B2Gold Tailings Management Procedure (2021)
12. International Cyanide Management Institute - International Cyanide Management Code (2021)
13. ISO21795:2021 Mine Closure and Reclamation Planning Standard (2021)
14. ISO14001:2015 Environmental Management Systems (as required)

## HEALTH, SAFETY \& ENVIRONMENTAL MANAGEMENT SYSTEM STRUCTURE

B2Gold utilizes a hierarchical system for its overall HSE MS structure, where each component shall meet the requirements of those in the higher levels in order to achieve a robust and sustainable management system.
As shown in Figure 1 below, these Environmental and Biodiversity Performance Standards are a fundamental component of B2Gold's HSE MS structure, which encompass B2Gold's Policies, Corporate HSE MS and HSE Performance Standards, relevant site procedures and supporting documentation.


Figure 1: B2Gold's 2024 Corporate and Site HSE Management System Structure

The following describes the hierarchy and individual components of the B2Gold Corporate and B2Gold Site HSE MS (as defined in Figure 1):

## B2Gold Corporate

1) B2Gold Corporate Policies (Occupational Health and Safety [OHS], Environment and Biodiversity, Social)

- The B2Gold Corporate Policies direct and restrict the plans, decisions, and actions of B2Gold as they relate to the achievement of its objectives for Health, Safety, Environmental and Social.


## 2) B2Gold Corporate HSE Management System Standards

- The B2Gold Corporate HSE MS Standards define to B2Gold sites "what" HSE systems and processes are required to be implemented and maintained.

3) B2Gold Corporate OHS Performance Standards

- The B2Gold Corporate OHS Performance Standards define the minimum operating and performance requirements for OHS for each B2Gold site. These OHS Performance Standards shall be used to reduce OHS risks across sites.

4) B2Gold Corporate Environmental and Biodiversity Performance Standards (these Standards)

- The B2Gold Corporate Environmental and Biodiversity Performance Standards define the minimum operating and performance requirements for environment and biodiversity for each B2Gold site. These Environmental and Biodiversity Performance Standards shall be used to reduce environmental risks and impacts across sites.

5) B2Gold Supporting HSE Tools

- A wide range of HSE templates, forms, checklists, guidelines, procedures, HSE management system software etc, exist to enable sites to implement the requirements defined within the B2Gold HSE MS and Performance Standards in a structured and consistent manner.


## B2Gold Sites

6) Site HSE Management System Procedures

- Describes "how" the Management System functions at a B2Gold site.

7) Site HSE Performance Management Plans

- Describes "how" the individual OHS and Environmental and Biodiversity Performance Standards function and are implemented at a site level, inclusive of operational controls.

8) Site Additional Supporting HSE Documents and Records

- A wide range of HSE procedures, forms, etc. are utilized to enable sites to implement and/or record the processes and outputs of their HSE management system. Examples include site Emergency Response Plans, inspection checklists, site HSE monitoring schedules, permit to work forms, etc.


## External

## 9) Audit Processes

- At two-yearly intervals, B2Gold commissions independent external auditors to audit each site against the Standards defined in 2), 3), 4) and 5) above. Audit reports are issued, non-conformances and agreed observations are required to be addressed and closed-out in a timely manner.
- In addition to the above, audits are commissioned to, and completed by, technical specialists against requirements specified in the above B2Gold HSE Performance Standards.


## TERMS \& DEFINITIONS

Relevant key terms and definitions that relate to B2Gold's 2024 Environmental and Biodiversity Performance Standards are provided below:

## "Acid Rock Drainage"

Drainage of acidic water from facilities that contain acid generating material (e.g., open pits or waste rock disposal facilities). It is caused by the oxidation of sulfide minerals in rock following their exposure to oxygen. Water that percolates through or comes in contact with these minerals becomes acidic and may mobilize metals.

## "As Low As Reasonably Practicable (ALARP)"

ALARP requires that all reasonable measures be taken with respect to "tolerable" or acceptable risks to reduce them even further until the cost and other impacts of additional risk reduction are grossly disproportionate to the benefit.

## "Baseline Conditions"

The existing environmental conditions, i.e., the physical, chemical, or biological setting, of a proposed project area prior to disturbance by project-related development.

## "Berm"

Containment structure that could be made out of earth, concrete, plastic, or other material. Also known as "bund".

## "Closure"

The process followed when a site has reached the stage in its life cycle where the intended mining use has been permanently concluded. This generally includes decommissioning activities, reclamation and revegetation of disturbed areas for long-term physical and chemical stabilisation of the site. This typically includes incorporating stakeholder consultation regarding post-mining use.

## "Closure Success Criteria"

An agreed standard or level of performance which demonstrates successful closure of a mine site. Specific milestones that indicate progress towards achievement of mine closure objectives, as agreed with stakeholders.

## "Critical controls"

A control that is critical to preventing a potential undesirable event or mitigating the consequences of such an event. The absence or failure of a critical control would disproportionately increase the risk despite the existence of the other controls.

## "Decommissioning"

The process that begins near or at the cessation of mineral processing and ends with the removal of all unwanted infrastructure and services.

## "Energy efficiency"

Using less energy to achieve the same or a greater level of production output.

## Energy performance

Using the minimum amount of energy necessary to meet business objectives.

## "Environmental Impact"

Any change to the environment whether adverse or beneficial, wholly or partially resulting from a site's activities.

## "Hazard"

Any substance, human activity, condition or other agent that may cause harm, loss of life, injury, health impacts, loss of integrity of natural or built structures, property damage, loss of livelihoods or services, social and economic disruption, or environmental damage.

## "Hazardous Waste"

Any waste containing significant quantities of a substance that may present danger to human health and the environment when released into the environment or is improperly managed. Possesses at least one of five characteristics (ignitable, corrosive, reactive, toxic, radioactive), or is listed in-country as a hazardous waste.

## "Leachate"

Water that has percolated through a solid material (e.g., tailings, ore, waste rock, landfill) and leached out some of the constituents of that solid material.

## "Leak Detection Recovery System"

Fluid pumping system located between two liners (with at least one of the liners being a geosynthetic liner) that collects and pumps out detected fluid.

## "Monitoring"

The gathering, analysis (especially for trends) and interpretation of information for the assessment of performance.
Examples of monitoring includes: air, soil and water quality, flora and fauna, reclamation, social aspects including complaints, operational dust, noise, vibration, property damage. Monitoring may be continuous, short-term or long term and may be undertaken manually or be automated.

## "Non-Hazardous Waste"

Wastes that do not have any of the following characteristics: ignitability, corrosivity, reactivity, or toxicity, and are not listed in-country on hazardous waste lists.

## "Point Source"

A stationary location or fixed facility from which contaminants are or may be discharged (e.g., a pipe, stack, ditch, well, or ore pit).

## "Process Pond"

Ponds utilized to hold/contain process solution on a regular basis. These do not include contingency ponds (e.g., stormwater ponds).

## "Quantitative Performance Objectives (QPOs)"

In relation to tailings management, QPOs provide critical controls consistent with design intent, criteria, and regulatory requirements. Sites shall establish tailing storage facilities (TSF) specific QPOs that provide a high level of assurance in preventing high consequence events.

## "Reclamation"

The process of restoring the mine site to a natural or economically useable state as provided in a reclamation plan. Reclamation results in productive and sustainable landscapes to meet a range of conditions that might allow for biodiversity conservation, recreational or agriculture uses, or various forms of economic development.

## "Trigger Action Response Plan (TARP)"

A TARP is a tool to manage risk controls, including critical controls. TARPs provide pre-defined trigger levels for performance criteria that are based on the risk controls and critical controls of the tailings facility. The trigger levels are developed based on the performance objectives and risk management plan for the tailings facility. TARPs describe actions to be taken if trigger levels are exceeded (performance is outside the normal range), to prevent a loss of control. A range of actions is pre-defined, based on the magnitude of the exceedance of the trigger level.

