TAILINGS FACTSHEET

Introduction by Mark Cutifani, Chief Executive

The physical activities of extracting and processing ore to separate valuable metals and minerals have long involved significant quantities of residue material – including tailings. As the world's demand for raw materials has grown at an accelerating pace in recent decades, and as the grades of many ores have decreased over time, so the volumes of this residue material have increased, exponentially.

In recent years, the world has witnessed a number of catastrophic tailings dam failures with tragic consequences, caused by a variety of factors, some of which may never be fully understood. However, there is a clear ethical and moral imperative to use all possible endeavours to ensure that tailings facilities are managed to the highest standards of safety using the latest technologies so that our industry can rebuild trust with all our stakeholders.

At Anglo American, we upgraded our technical standard for tailings dam safety management in early 2014, going beyond established regulatory and industry standards in many respects. However, this is not a competition and we continue to share our experiences with others in the industry in pursuit of minimising impacts to ecosystems and helping create a safer environment.

We also recognise that, rather than simply scaling up mining's processes to meet demand (as has been common practice), the industry will need to find new, more efficient and more sustainable ways of working.

With certain ores, it is possible to significantly de-water the waste and then deposit the waste material with lower moisture content, significantly improving its stability and reducing risk.

We are also working on a number of technologies that we expect to significantly decrease the volume of waste material produced: through bulk ore sorting, for example, whereby we are able to process a greater proportion of ore and less waste rock; and through coarse particle recovery technology which allows us to extract the metal or mineral from larger particle sizes, thereby allowing far greater and easier de-watering of the tailings.

Both of these technologies also offer major energy and water usage reductions for each tonne of metal or mineral produced.

We hope you find this factsheet useful to better understand tailings, the approach we take to seek to ensure the safety of tailings storage facilities, and the different future we are working towards.

WHAT ARE TAILINGS?

Tailings are the materials left over following the processing of mined ore that separates the valuable metals or minerals from the host rock. Tailings are not the same as waste rock, the latter being soil or rock or other material that covers or surrounds an orebody and that is displaced during mining but is not processed.

Generally speaking, mineral processing involves crushing and grinding ore into fine particles and mixing with water and other agents to facilitate the extraction of the targeted metals or minerals. Once separated, the remaining material tends to be a mixture of fine particles (that range in size from a grain of sand to much finer powder) and water. This tailings mixture is de-watered to the extent possible and then stored in a tailings storage facility (TSF).

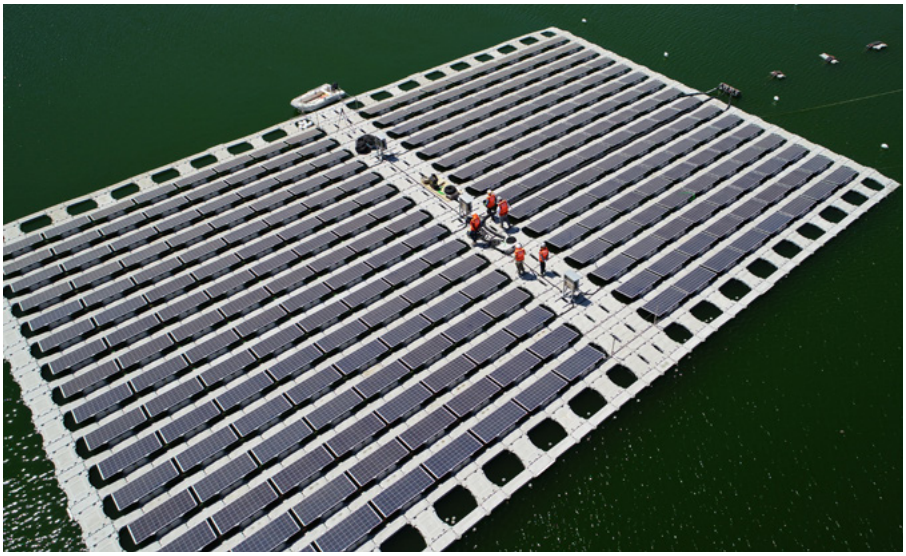
There are other forms of mineral residue that consist of coarse material - from diamond or coal processing, for example - that are more readily de-watered and can be dry-stacked or deposited in mined-out pits.

The El Torito tailings facility at El Soldado, Chile.

WHAT IS A TAILINGS STORAGE FACILITY?

TSFs play a major role in many mining operations around the world. A TSF is a highly engineered structure which consists of one or more tailings dams, with embankments designed to permanently store the tailings. Every individual dam is unique and is designed, built and operated to specifications that are tailored to the physical nature of the tailings material itself, and a number of other factors including the local climate, topography and seismicity.

As the tailings are deposited into the engineered TSF over time, much of the water separates from the fine particles (either naturally or through a mechanised process) and is recycled back into the mining processes.

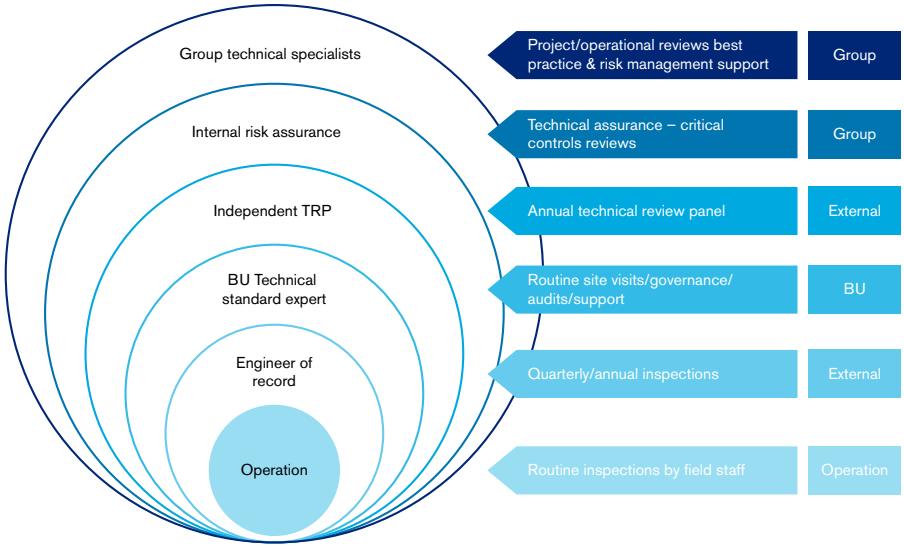


The solar panels installed on the Las Tórtolas tailings facility at Los Bronces, Chile.

ANGLO AMERICAN'S TECHNICAL STANDARD (OVERVIEW)

Anglo American's TSFs are subject to our mandatory Group Technical Standard, in place since 2014 and which exceeds current ICMM (International Council on Mining and Metals) and regulatory requirements in all host jurisdictions. This best-in-class standard sets minimum requirements for design criteria, monitoring, inspection and surveillance, and was peer-reviewed by international specialists.

TSF SAFETY MANAGEMENT



DESIGN AND CHANGE MANAGEMENT

- All TSFs are built following established minimum design criteria aimed at ensuring structural integrity.
- Change management is delivered to the highest standards aimed at ensuring the structural integrity is preserved over time.
- All TSFs have a Consequence Classification of Structure (CCS) rating based on the potential hazard evaluation.

MAINTENANCE AND MONITORING

- 'Major' or 'High' CCS facilities have a Competent Person in charge.
- Each TSF has an Engineer of Record (EoR), providing continuous support from initial design and construction, to monitoring and support.
- Dedicated team of Group level Engineering specialists provide oversight, strategic direction and technical support. A review of tailings facilities at non-managed operations is done on a rotational basis approximately every three years.
- Various forms of remote and other monitoring technology are used to measure TSF performance, including ground movement and seepage.

INSPECTION AND AUDIT

- Local site-based operational personnel conduct daily / weekly / biweekly inspections.
- EoR conducts formal dam safety reviews at all managed sites on a quarterly, semi-annual and / or annual basis.
- A technical review panel conducts an independent review of critical facilities at least once per year.

Two operators supervising operations at the Las Tórtolas tailings facility at Los Bronces, Chile.

Anglo American's Group Technical Standard is available at: www.angloamerican.com/tsf

TAILINGS SAFETY TECHNOLOGY

Passive seismics

We are using a geophysical method called passive seismics, where we use ambient noise to image the interior of our tailings dams. This technique can identify phreatic surface levels within the dams and identify any potential soft or unconsolidated zones. To date we have run this technique across our Las Tortolas dam in Chile (Los Bronces mine) and at Helena in South Africa (Mototolo mine). We are in the process of investigating how best to deploy this method as an additional check on our other dams to better understand the conditions of these structures.

Fibre optic sensing

We have also installed fibre optic cable technology into some of our tailings dams and we will complete three pilot projects by the end of 2019, providing near real-time monitoring of strain, deformation and seepage in our dams. In some cases, satellite technology will be combined with fibre optic cable monitoring to complement the performance and behaviour of the structure.

Micro-seismic monitoring

At our new Quellaveco copper mine that we are developing in Peru, we are taking further steps by introducing micro-seismic monitoring of tailings dam foundations using specialised sensors. This technology will provide high quality target monitoring of various structures in the dam body and the foundation, localising any potential movement. It is also aimed at the geological and structural features in the dams and their foundations. We believe this approach is a first for the industry in relation to tailings dams performance.

FUTURESMART MINING™ – changing the future of tailings

Anglo American is working on implementing a number of step-change technologies that we expect to significantly decrease the volume of waste material produced in the extraction and processing of mineral ore, while also offering major water and energy usage reductions for each tonne of metal or mineral produced, as well as smaller overall mine waste footprints.

Coarse particle recovery

Coarse particle recovery (CPR) is a recovery method that uses a fluidised bed to enable valuable minerals, with as little as 1% mineral surface exposure, to be separated from gangue (commercially valueless ore). Energy savings can be realised but the water savings are even more significant as a far greater proportion of the water used in processing can be more easily recovered and recycled, thereby also creating a drier and more stable mineral residue deposit.

Inspection of fibre optic flow meter installation at Mogalakwena PGMs mine, South Africa.

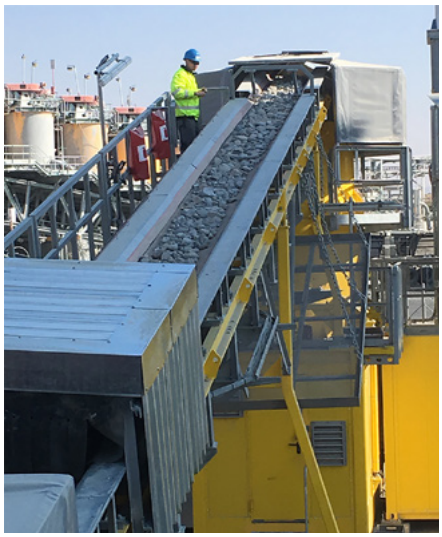
Bulk sorting

Bulk sorting leverages new sensor technology that can, in real time, reject a proportion of sub-economic material early in the processing sequence, creating opportunities to both increase plant throughput and reduce the volume of waste material to the TSF. Bulk sorting thereby also delivers significant reductions in water and energy intensity.

Shock-break

Shock-break (VeRo) is a new comminution device, which uses three stages of high-speed blades to reduce ore to the targeted size and expose mineral surfaces. Anglo American uses more than three million MWhs of energy each year crushing and grinding rock – this technology can reduce energy consumption by more than 30% within the grinding process. This method of comminution delivers a dry product and is a key enabler for dry separation processes, which remains our longer-term goal to achieve dry tailings.

Combining bulk sorting, coarse particle recovery and shock-break is expected to enable greater operational efficiency and materially reduce our consumption of water and energy. In 2019, we will further develop our dry-disposal technologies, with a view to recovering more than 80% of the water we use across our operations.



Shock-break trials taking place at the Baobab PGMs concentrator, South Africa.

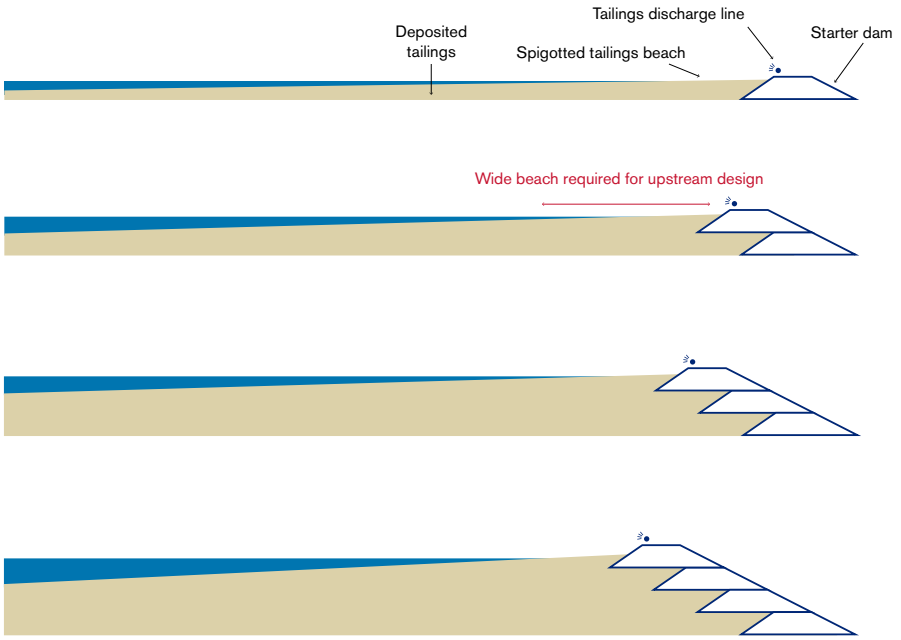
HOW ARE TAILINGS DAMS CONSTRUCTED?

There are six fundamental types of tailings dam, each constructed using different techniques:

UPSTREAM

The upstream method starts with the construction of a starter dam. Tailings will naturally separate so that coarse material settles closest to the starter dam, while liquid and fine material settles furthest away. As the level of the materials rises, the crest of the dam is raised "upstream", using the support of the previous dam raise and the tailings beach area. Its stability is dependent on the in situ strength of the tailings material itself.

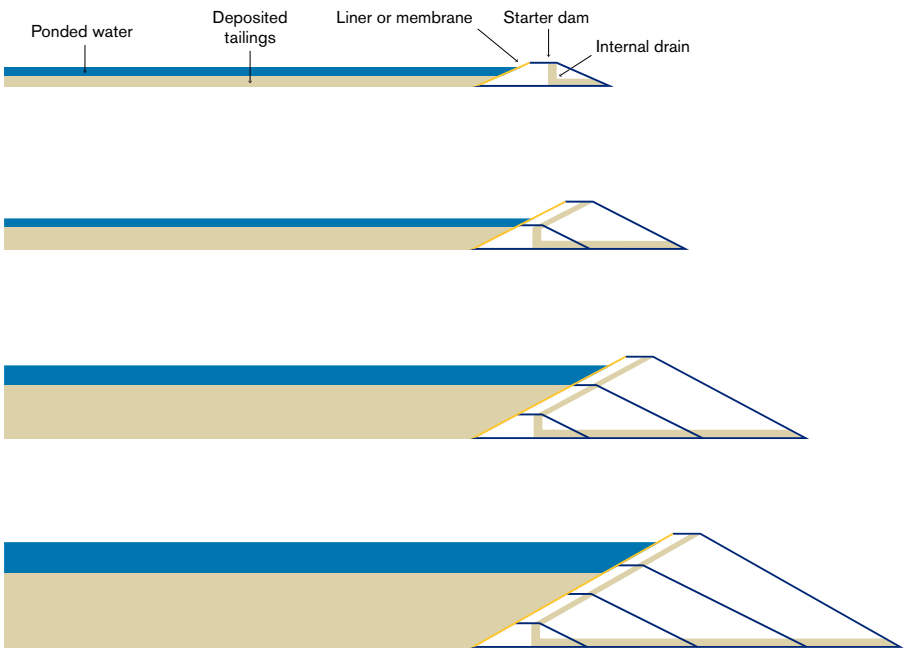
This method is more suitable in dry climates with limited seismic activity, low deposition rates, and flat topography.



DOWNSTREAM

The downstream method begins in most cases with a starter dam that has a low permeability zone or liner to control and minimise water loss. In some cases it also serves to initially store water for start-up of the plant. Tailings are placed behind the dam and the embankment is raised by building the new wall on the downstream slope of the previous section. The crest of the dam thereby moves "downstream" or away from the starter dam. A liner or membrane can be used on the upstream slope of the dam to prevent erosion and limit infiltrations.

Downstream tailings dams require more material to build than upstream constructed dams, but are considered more stable, making them better suited for areas with seismic activity and more intense rainfall or water management requirements.

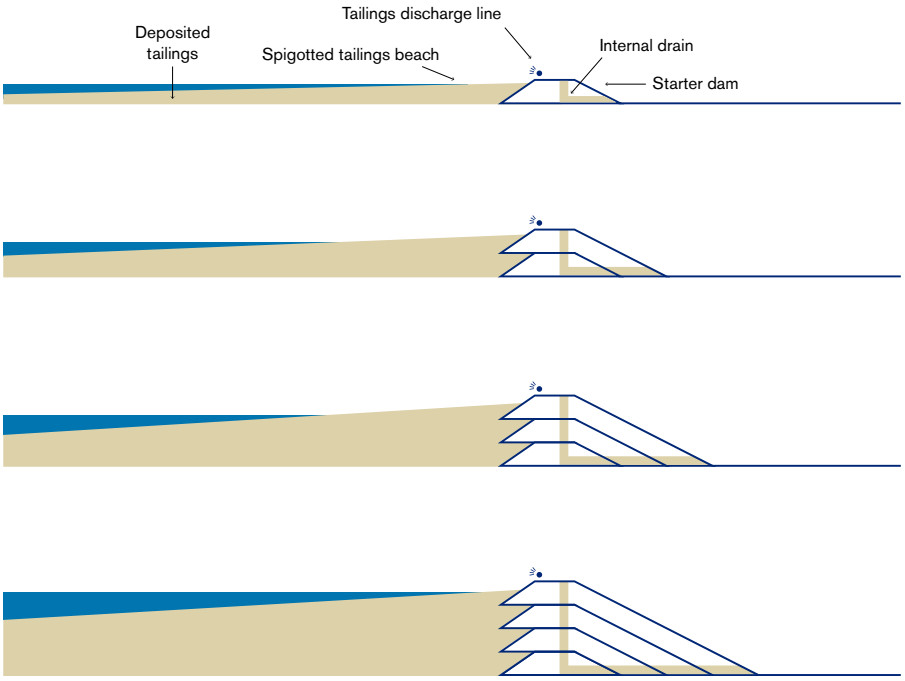


CENTRELINE

The centreline method sits between the upstream and downstream construction methods. Like the upstream method, the tailings are discharged on top of the dam to form a beach behind the dam wall.

When the dam is raised, material is placed on both the tailings beach and the existing embankment. The embankment crest is being raised vertically on the “centreline” and does not move in relation to the upstream and downstream directions.

The centreline design is suitable in areas with moderate rainfall and moderate to high seismic risk.



HYBRID

A hybrid dam is a combination of the tailings dam types that are defined as either Downstream, Upstream or Centreline. Some tailings dams have changed construction type in the past and now are defined as 'hybrid' or 'mixed' type. In addition, some hybrid dams may incorporate waste rock materials in their structure.

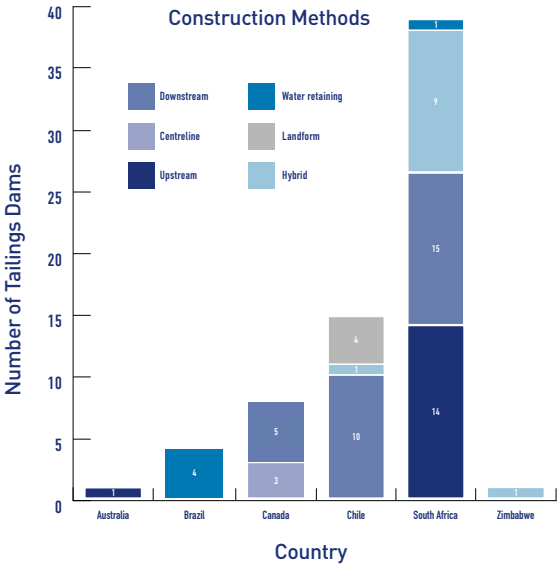
LANDFORM

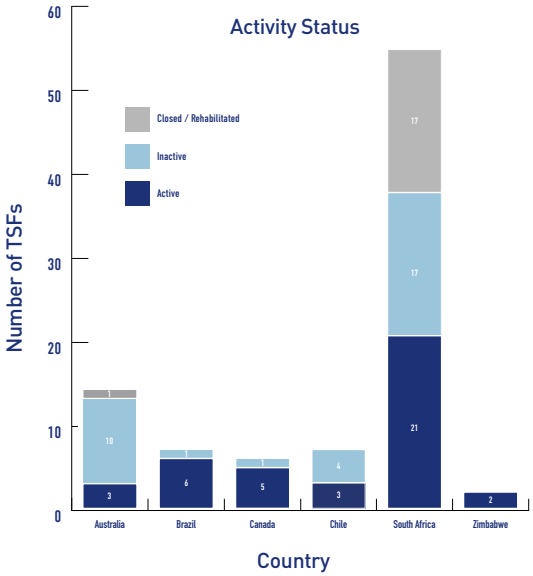
A landform is one that is typically a very old legacy tailings dam that has dried out to the point where it does not constitute a wet dam anymore, nor is considered to be a containment structure. The main features, such as the outer wall slopes, may also be altered or flattened by erosion to the point that the facility is unrecognisable in comparison to its previous engineered state.

WATER RETAINING

Water retaining type of dams are built using selected imported fill materials from designated borrow areas and quarries, placed in a controlled manner in lifts, typically resulting in an embankment structure that is designed to store water and tailings in direct contact. Water retaining structures may have specific engineered structural features, such as riprap, a low permeability liner or core zone, internal filters, and drainage system, to safely manage stored water and seepage flow through the dam body.

ANGLO AMERICAN MANAGED OPERATIONS - SUMMARY BY COUNTRY





Anglo American manages 91 TSFs and 68 tailings dams

Notes: Total number of TSFs differs from the total number of tailings dams as one TSF may include more than one dam.
Also, TSFs include all dry stack and in-pit disposal methods, which do not necessarily have dams.