

CENTAMIN'S COMMITMENT TO SAFE TAILINGS FACILITY MANAGEMENT AND IMPLEMENTATION OF ITS TAILINGS GOVERNANCE FRAMEWORK, DATED 31 AUGUST 2021

Forward from the CEO

As a responsible mining company, Centamin is committed to the Global Industry Standard on Tailings Management ("GISTM") with the objective to cause no harm to people or the environment through tailings facility design, operation and closure. We have commenced a systematic review of our tailings governance and management framework against the requirements of the GISTM targeting compliance by August 2023.

In late-2019, Centamin disclosed information about its tailings storage facilities ("TSFs") at the request of the Investor Mining and Tailings Safety Initiative. We are pleased to provide this updated disclosure including the attached submission to the Global Tailings Portal following the commissioning of our second TSF at Centamin's Sukari Gold Mine ("Sukari") in Egypt.

We now have two active TSFs ("TSF1" and "TSF2") in operation at Sukari, both designed using the downstream method of tailings construction. The first, TSF1, has been operating since 2010 and underwent remediation work during 2020 in preparation for decommissioning and closure as it nears full capacity. The second, TSF 2, commenced operation in early-2021 and will provide tailings storage for the current Life of Mine plan.

Our TSFs are designed and operated in accordance with ANCOLD regulations; meet host country legislative requirements; and are managed through a robust framework of principles, standards and guidelines to ensure structural stability, human safety and environmental protection, whilst maintaining efficient and responsible production.

The TSFs are monitored through a layered assurance system by a team of internal specialists, an external Engineer of Record, an Independent Technical Reviewer and with oversight maintained by the Centamin Executive and Board of Directors.



Martin Horgan, CEO

Tailings Governance

Centamin's is committed to the highest standard of responsible tailings management and employs a robust governance approach based on minimum operating requirements, risk management, review and assurance.

In 2020, Sukari developed a suite of Critical Risk Standards that define minimum requirements for the management of critical operational risks. The Tailings Management Standard sets the minimum requirements for the management of tailings to protect human health and the environment through facility design, operation and closure. The Standard also covers incident and emergency response, management of change processes, performance reviews and independent audits.

Each TSF has an Operating Manual covering the operation, monitoring, maintenance, construction, closure and rehabilitation guidelines for the facility; clear definition of responsibility for key personnel; and a Trigger Action Response Plan to effectively assess deviations from standard operating practice and required actions, including what to do in the event of an incident or emergency.

The TSFs are monitored through a layered assurance system by a team of internal specialists, Sukari's formally appointed external Engineer of Record ("EoR") and an Independent Technical Reviewer. Both the EoR and Independent Technical Reviewer are empowered to conduct routine performance and safety reviews of Sukari's Tailings Management System.

Centamin's Board of Directors (the "Board") have ultimate accountability for the safe management of our tailings facilities including, emergency preparedness and response and recovery in the event of failure. The Board is supported in this role by its Technical and Sustainability Committees, who oversee the development and implementation of the Tailings Management System.

In late-2020, Centamin commenced a systematic review of its tailings governance and management framework against the requirements of the Global Industry Standard on Tailings Management¹ (“GISTM”). Centamin voluntarily commits to the GISTM and targets compliance by August 2023.

Performance

At Sukari, there are two active TSFs that are both designed and operated to provide permanent and secure containment of all solid tailings material over the Life of Mine. The embankments have been constructed using the downstream method and the facilities comprise an HDPE geomembrane liner to control seepage, reduce the risk of groundwater contamination and maximise water return to the process. To date there has been no reportable incidents associated with the operation of the facilities.

In 2020 various remedial works were performed on TSF1 to extend the operating life as far as practical and prepare for decommissioning and closure, including: buttressing of the embankment to establish the angle of repose for closure; and the construction of evaporation ponds to dewater the facility. These works were completed in November 2020.

In parallel, construction was completed on TSF2 in December 2020. TSF2 will provide 150 million tonne of dry tailings storage over the Life of Mine. The facility is designed in accordance with the ANCOLD 2012 guidelines and has a dam failure consequence category of High A and an environmental spill consequence category of Low. As the mine develops and waste rock dumps extended, the TSF 2 embankment will be further buttressed and the failure consequence category will decrease from High A to High C. Through its operating life the facility is designed to be raised through 13 staged downstream lifts. In 2021 Sukari advanced construction of Stage 2 and Stage 3 lifts for which works are ongoing.

The TSFs are designed and operated for no discharge to the environment. Any excess tailings water is contained within the facility and returned to the Process Plant for reuse, or is lost through evaporation. A seepage control system reduces seepage rates to manageable levels and includes: low permeability geomembrane liners; an underdrainage collection and return system; and a leachate collection and return system.

There are 15 monitoring boreholes adjacent and downstream to the TSFs. Water samples are analysed weekly by the onsite laboratory and monthly by an independent and accredited offsite laboratory. The test results of all ground water quality are then periodically reviewed independently.

Review and Assurance

To ensure facilities are performing as designed, we have several programmes for inspecting, auditing and reporting on the safety of our tailings facilities.

At Sukari a Tailings Facility Manager is responsible for the management of the TSFs with the daily operations carried out by a dedicated Tailings Facility Operator who conducts daily performance monitoring including visual inspections to confirm the operational and structural integrity of the facility. This is supplemented by routine monitoring and inspections by the Health Safety and Environment department.

In 2020, our Engineer of Record maintained an almost permanent presence at Sukari to oversee remedial works on TSF1 and construction of TSF2. The Engineer of Record is scheduled to conduct a formal performance review of the TSFs in Q3 2021.

The last independent Dam Safety Review was conducted in November 2019, which confirmed the operational and structural integrity of the TSF1 and verified the design of TSF2. The next independent review is scheduled for Q4 2021.

Sukari has a well-developed emergency action plan in the event of any potential breach. The plan is communicated to all employees and contractors and emergency drills are held regularly. The emergency response plan is reviewed internally at least annually.

The information presented in this report is true to the best of the Centamin directors’ knowledge and understanding as at the date of this report and based on the governance, technical and internal review systems.

¹ <https://globaltailingsreview.org/global-industry-standard/>

Annex A: Global Tailings Portal² Disclosure Table

Question	Notes	TSF 1	TSF 2
1. “Tailings Name/identifier Facility”	Please identify every tailings storage facility and identify if there are multiple dams (saddle or secondary dams) within that facility. Please provide details of these within question 20.	Sukari Tailings Storage Facility 1 (TSF 1) comprising singular dam	Sukari Tailings Storage Facility 2 (TSF 2) comprising singular dam
2. Location	Please provide Long/Lat coordinates	24° 57’ 40’’ N 34° 41’ 56’’ E	24° 55’ 58’’ N 34° 41’ 39’’ E
3. Ownership	Please specify: Owned and Operated, Subsidiary, JV, NOJV, as of March 2019.	Owned and operated	Owned and operated
4. Status	Please specify: Active, Inactive/Care and Maintenance, Closed etc. We take closed to mean: a closure plan was developed and approved by the relevant local government agency and key stakeholders were involved in its development; a closed facility means the noted approved closure plan was fully implemented or the closure plan is in the process of being implemented. A facility that is inactive or under C&M is not considered closed until such time a closure plan has been implemented.	Active	Active
5. Date of initial operation	(date)	2010	2021

² <https://tailing.grida.no/>

Question	Notes	TSF 1	TSF 2
6. Is the Dam currently operated or closed as per currently approved design?	Yes/No. If 'No', more information can be provided in the answer to question 20.	Yes	Yes
7. Raising method	Note: Upstream, Centreline, Modified Centreline, Downstream, Landform, Other.	Downstream	Downstream
8. Current Maximum Height	Note: Please disclose in metres.	60m	Stage 1 – 26.7m Stage 3 – 41.2m currently under construction to provide storage over the next 2 years
9. Current Tailings Storage Impoundment Volume	Note: (m ³ as of August 2021)	68.2Mm ³	2.3Mm ³
10. Planned Tailings Storage Impoundment Volume in 5 years' time	(m ³ as planned for January 2024)	69.0Mm ³	115 Mm ³ (150 Mt)
11. Most recent Independent Expert Review	(date) For this question we take 'independent' to mean a suitably qualified individual or team, external to the Operation, that does direct the design or construction work for that facility.	November 2019	Design and construction supervision was performed by the external Engineer of Record, who themselves conducted a peer review of the TSF2 Design Report in July 2020
12. Do you have full and complete engineering records including design, construction, operation, maintenance and/or closure?	(Yes or No) We take the word 'relevant' here to mean that you have all necessary documents to make an informed and substantiated decision on the safety of the dam, be it an old facility, or an acquisition, or legacy site. More information can be provide in your answer to Q20.	Yes	Yes
13. What is your hazard categorisation of this facility, based on the consequence of failure?		High A	High A

Question	Notes	TSF 1	TSF 2
<p>14. What guideline do you follow for the classification system?</p>		<p>Australian National Committee on Large Dams (ANCOLD)</p>	<p>Australian National Committee on Large Dams (ANCOLD)</p>
<p>15. Has this facility, at any point in its history, failed to be confirmed or certified as stable or experienced notable stability concerns, as identified by an independent engineer (even if later certified as stable by the same or a different firm)?</p>	<p>(Yes or No) We note that this will depend on factors including local legislation that are not necessarily tied to best practice. As such and because remedial action may have been taken, a 'Yes' answer may not indicate heightened risk.</p> <p>Stability concerns might include toe seepage, dam movement, overtopping, spillway failure, piping etc. If yes, have appropriately designed and reviewed mitigation actions been implemented?</p> <p>We also note that this question does not bear upon the appropriateness of the criteria, but rather the stewardship levels of the facility or the dam. Additional comments/information may be supplied in your answer to Q20.</p>	<p>No</p>	<p>No</p>
<p>16. Do you have internal/in house engineering specialist oversight of this facility? Or do you have external engineering support for this purpose?</p>	<p>Note: Answers may be 'Both'.</p>	<p>External</p>	<p>External</p>

Question	Notes	TSF 1	TSF 2
17. Has a formal analysis of the downstream impact on communities, ecosystems and critical infrastructure in the event of catastrophic failure been undertaken and to reflect final conditions? If so, when did this assessment take place?	Note: Please answer 'yes' or 'no' and if 'yes', please provide a date.	Yes. 2009 2019	Yes 2019
18. Is there a) a closure plan in place for this dam and b) does it include long term monitoring?	Please answer both parts of this question (e.g. Yes and Yes).	Yes and yes	Yes and yes
19. Have you, or do you plan to assess your tailings facilities against the impact of more regular extreme weather events as a result of climate change, e.g. over the next two years?	(Yes or No)	Yes in 2009 and 2019	Yes in 2019

Question	Notes	TSF 1	TSF 2
<p>20. Any other relevant information and supporting documentation.</p> <p>Please state if you have omitted any other exposure to tailings facilities through any joint ventures you many have.</p>	<p>Note: this may include links to annual report disclosures, further information in the public domain, guidelines or reports etc.</p>	<p>Q10: Final storage impoundment volume depends on deposition and pond management</p> <p>Q11: The EoR had a presence on site for the majority of time in 2020 to supervise remediation works.</p> <p>A performance review by the EoR is scheduled for Q3 2021; and a Dam Safety Review by the Independent Technical Reviewer is scheduled for Q4 2021.</p> <p>Q15: In 2019, the Independent Technical Reviewer concluded that there is sufficient commitment to ensure the safe and efficient operation of the TSF and the overall assessed ranking was “green A”. The key recommendations of the Reviewer included: reduction in the volume of supernatant; dewater the tailings mass by the pumping of leachate collection; install additional piezometers and extend hydrogeological modelling to better characterise downstream seepage.</p> <p>Under the design supervision of the EoR, remediation work commenced in 2020 to reduce the risk classification of the TSF and to prepare for decommissioning and closure.</p>	<p>Q8. Current operation height (stage 1) 26.7m. Construction height (Stage 3) 41.2m</p> <p>Q11: A performance review by the EoR is scheduled for Q3 2021; and a Dam Safety Review by the Independent Technical Reviewer is scheduled for Q4 2021.</p>