

## Details of Sasa mine tailings storage facilities in North Macedonia, in accordance with the Church of England Pensions Board request, July 2022

1. "Tailings Facility" Name/identifier	TSF 1 TSF 2 TSF 3-1 TSF 3-2 TSF 4
2. Location	Gauss-Krüger coordinate system: TSF 1: Y=7 626 188; X=4 664 211 TSF 2: Y=7 626 384; X=4 663 656 TSF 3-1: Y=7 626 777; X=4 663 584 TSF 3-2: Y=7 627 228; X=4 663 165 TSF 4 (active): Y=7 627 601; X=4 662 437
3. Ownership	All TSFs are owned by Sasa mine, which is a subsidiary of Central Asia Metals and was acquired by the Company in November 2017
4. Status	TSF 1: closed TSF 2: closed TSF 3-1: closed TSF 3-2: Inactive/care and maintenance TSF 4: active
5. Date of initial operation	TSF 1 - 1964 TSF 2 - 1974

	TSF 3-1 - 1990
	TSF 3-2 - 2007
	TSF 4 - 2020
6. Is the Dam currently operated	
or closed as per currently approved design?	TSF 1: Closed (TSF 1 was operational from 1964-1974. It is closed, but original Project design has not been located. However, Sasa Closure Plan developed by WSP Golder in February 2022 includes TSF 1 closure).
	TSF 2: Closed (TSF 2 was operational from 1974-1990. It is closed, but original Project design has not been located. However, Sasa Closure Plan developed by WSP Golder in February 2022 includes TSF 2 closure).
	TSF 3-1: Closed (TSF 3-1 was operational from 1990 to March 2003, when the mine closed. Operations recommenced and the facility was in use again in June 2006 - 2007. TSF 3-1 was closed according to the Project design, which was specified in 2008 by Geologing DOO, Skopje. Sasa Closure Plan developed by WSP Golder in February 2022 also includes TSF 3-1 closure).
	TSF 3-2: inactive/ care and maintenance (TSF 3.2 was operational from 2007 to 2020) Mineral Waste Management ('MWM') plan developed by University Goce Delcev, Stip, October 2019, which includes the TSF 3-2 closure plan. IPPC permit issued by Ministry of Environment and Physical Planning ('MoEPP') on 29/10/19, with obligation for capping of the TSF 3-2.
	During May 2021, Sasa submitted an amendment to the MoEPP, 'Technical solution for the removal of the geosynthetic liner from the downstream slope of TSF 3.2 and for the reclamation of TSF 3.2 for Sasa mine to ensure acceptable environmental protection' this amendment was developed by the University of Goce Delcev, Stip. Sasa are awaiting approval from the Ministry of Environment and Physical Planning before completing the capping work, once approved TSF 3.2 will be closed in accordance with the project design and approved closure plans. In addition, the Sasa Closure Plan, which was developed by WSP Golder in February 2022 includes TSF 3-2 closure.
	TSF 4: Active/operational (TSF 4 has been operational since April 2020). Mineral Waste Management ('MWM') plan developed by University Goce Delcev, Stip, October 2019 includes TSF 4. IPPC permit issued by MoEPP on 29/10/19, includes TSF4. In addition, the Sasa Closure Plan developed by WSP Golder in February 2022 includes TSF 4 closure.
7. Raising method	TSF 1 - Downstream method TSF 2 - Downstream method
	TSF 3-1 - Downstream method

	TSF 3-2 - Downstream method
	TSF 4 - Downstream method
8. Current Maximum Height	TSF 1 - 44m agl TSF 2 - 62m agl TSF 3-1 - 61m agl TSF 3-2 - 67m agl TSF 3-2 - 67m agl TSF 4 - 45m agl as of June 2020, maximum height according to project design is 66 m agl.
9. Current Tailings Storage Impoundment Volume	TSF 1 - 1,398,000m <sup>3</sup> TSF 2 - 4,775,000m <sup>3</sup> TSF 3-1 - 4,900,000m <sup>3</sup> TSF 3-2 - 5,335,512m <sup>3</sup> April 2020 TSF 4 - 972, 800m <sup>3</sup> June 2022
10. Planned Tailings Storage Impoundment Volume in 5 years' time.	TSF 1 - 1,398,000m <sup>3</sup> TSF 2 - 4,775,000m <sup>3</sup> TSF 3-1 - 4,900,000m <sup>3</sup> TSF 3-2 - 5,335,512m <sup>3</sup> TSF 4 - 1,803,609m <sup>3</sup> by the 2027, however, with the implementation of the Cut and Fill Project, this may change.
11.Most recent Independent Expert Review	All Sasa Mine TSFs: Knight Piesold undertook an independent audit of all tailings facilities (closed and active), Q3 2021
	TSF 4: Tailing Storage Facility Assessment - Knight Piesold, November 2020 (following the TS4 leakage)
	TSF 3-2: Stability Review - Golder Associates (UK) Ltd, March 2019
	TSF 4: Qualitative Risk Assessment Memo - SRK Consulting (UK) Limited, October 2018
12. Do you have full and complete relevant engineering records including design, construction, operation,	Yes, more information provided in Q.20

maintenance, and/or closure?	
13. What is your hazard categorisation of this facility, based on the consequence of failure?	'Very high' consequences if failure occurred
14. What guideline do you follow for the classification system?	Canadian Dam Association Dam Safety Guidelines (CDA, 2013) Global Industry Standard of Tailings Management (GISTM, 2020)
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).	Yes - in 2003 while Sasa mine was not operational and prior to Central Asia Metals' ownership. More information provided in Q.20  Yes - in September 2020 there was a leakage from TSF 4. More information provided in Q.20.
16. Do you have internal/inhouse engineering specialist oversight of this facility? Or do you have external engineering support for this purpose?	Yes, both: internal TSF specialist employed directly by Sasa, plus external engineering support.
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?	<ul> <li>Yes</li> <li>Flood wave consequences analysis, designed by Faculty of Civil engineering Skopje, 2013</li> <li>Flood wave consequences analysis report, designed by Faculty of Civil engineering Skopje, 2013</li> <li>TSF 4 Qualitative Risk Assessment Memo, performed by SRK Consulting (UK) Limited, October 2018</li> <li>During H2 or 2022 the Faculty of Civil Engineering, University Skopje will complete a cascade Dam Break Assessment (DBA) for all TSFs in line with GISTM.</li> </ul>
18. Is there a) a closure plan in place for this dam, and b) does it include long term monitoring?	<ul> <li>a) Yes, there is a closure plan in place - 'Sasa Closure Plan', developed by WSP Golder in February 2022. This closure plan covers all facilities (TSF 1, TSF 2, TSF 3-1, TSF 3-2, TSF 4).</li> <li>b) Yes, the closure plan includes long term monitoring, specifying a minimum of 10 years post closure. Note</li> </ul>

	that long term monitoring procedures are already in place
	and tong term membering proceeds of an each in place
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. A hydrological study of the catchment that assessed return periods and extreme events was undertaken by SRK Consulting Ltd in Q4 2021. Sasa will continue to collect data and will update the hydrological study to include the impacts of climate change during the next model update.
20. Any other relevant information and supporting documentation.  Please state if you have omitted any other exposure to tailings facilities through any joint ventures you may have.	Other relevant information:  • Knight Piesold SASA Lead and Zinc Mine, 2021 Tailings Storage Audit Report  • CAML 2019 Sustainability report <a href="https://www.centralasiametals.com/investors/reports-and-presentations/">https://www.centralasiametals.com/investors/reports-and-presentations/</a> • Opinion on Sasa TSF stability, prepared by the Faculty of Civil Engineering, University of Skopje, 2019  • Operational plan for prevention and protections against floods, designed by Faculty of Civil Engineering, University of Skopje, 2014  • TSF 4 Qualitative risk assessment memo, performed by SRK Consulting (UK) Limited, October 2018  • Operational plan for implementation of technical monitoring of tailings dams with accompanying facilities and tailings ponds at Sasa Mine, prepared by Faculty of Civil Engineering, University of Skopje, 2019 and University Goce Delcev, Stip, 2019  • Ongoing monthly reports on integrity and functionality of the SASA tailings dams, designed by Prof. Golomeov, University Goce Delcev, Stip  • Annual report on integrity and functionality of the SASA tailings dams, designed by University Goce Delcev, Stip, 2018  • Summary report on the General condition of the dams of special interest of the R. Macedonia, prepared by the Dam Commission within the Ministry of Environment and Physical Planning (MoEPP), 2015  Information related to Q.1:  TSF 1, TSF 2, TSF 3-1, TSF 3-2 and TSF 4 are cascaded downstream and all TSF's are connected in one valley. Information related to Q.15:  On 30 August 2003, in the order of 150,000m³ of tailings leaked from TSF3-1 via a diversion tunnel and into the River Kamenica during a period when the mine was not operational and prior to Central Asia Metals ownership. The cause of the failure was a defective 'cap' within the roof of the ancillary pipe carrying TSF 3.1 drainage into the underlying river diversion structure (i.e. not a direct failure of the river diversion structure). A clean up of the

tailings that were released into the river and a full repair of the diversion tunnel was performed according to a design approved by the regulatory authorities. All activities were conducted by independent contractors under the supervision of the appropriate regulatory authorities.

On 14 September 2020, there was a short-term leakage of approximately 8,000m<sup>3</sup> of tailings into the local river. The leakage occurred due to water ingress along the composite liner interface through to the dam, resulting in a loss of strength and the subsequent subsidence of the dam crest. The leakage stopped soon after and nobody was harmed.

River remediation programme were completed in H1 2021 with all recoverable tailing being removed from the river. The water quality of the Kamenica River has returned to its baseline quality (status before the incident), and from a biodiversity perspective, the restoration activities performed along the River have proven to be successful; the biological flora and fauna have started to recover.

CAML retained the services of global consultants, Knight Piésold Limited, to advise on tailings management, and Wardell Armstrong, to advise on environmental matters.

The information contained within this document has been approved by Central Asia Metals' Chief Executive Officer.

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Nigel Robinson Chief Executive Officer