



Disclosure of MINSUR's Tailings Storage Facilities

Lima, 07 of June 2018

As part of our membership of ICMM, Minsur is responding today to the request from the Church of England Pensions Board and the Swedish Council on Ethics for information on mining companies' tailings storage facilities (TSF's).

Minsur currently manages 6 tailing storage facilities operating in San Rafael mine in Puno region, Peru (1) and Pitinga mine (5) in Manaus, Brazil. Since 2013, the Minsur's geotechnical management complies with all the commitments and obligations the regulatory frameworks and good practices towards different stages from site selection to rigorous surveillance into: design criteria, construction, operation, and closure tailings dams. Our critical facilities management (related TSF) considers the Canadian guidelines produced by MAC and the Canadian Dam Association (CDA) and the continued improvement by implementing recently updated versions of guidance's mentioned before. During the last 5 years, external reviews done by an external board that is composed of international experts have guided our tailings management and continual improvement.

As part of this continuous improvement and in compliance with the International Council on Minerals and Metals (ICMM) Tailing Governance Position Statement, Minsur has recently released its new Geotechnical Management Policy. Minsur is also revising and updating its technical standard for TSF safety management.

Note:

Minsur is a Peruvian mining company with over 40 years of experience, owned by BRECA Group, the country's main investment group enjoying a broadly diversified business base. Our Peruvian operations include; San Rafael tin mine, Pucamarca gold mine, Pisco tin refinery plant as well as the Mina Justa Nazca copper project. Minsur also owns Taboca mining company in Brazil, through Minera Latinoamerica, which operates the Pitinga tin, niobium and tantalum mine and the Pirapora smelter.

Annex 2: Disclosure requirements

Date: June 2019

Ownership	Mine Name	Tailing Facility Name	Location UTM Coordinates WGS84		Status		Date of initial operation	Is the Dam currently operated or closed as per currently approved design?	Raising method			Current Maximum Height (m)	Current Tailings Storage Impoundment Volume (m3) - Life to Date	Planned Tailings Storage Impoundment Volume in 5 years time (m3) - Life to Date	Most recent Independent Expert Review	Do you have full and complete relevant engineering records including design, construction, operation, maintenance, and/or closure?	What is your hazard categorisation of this facility, based on the consequence of failure?	What guideline do you follow for the classification system?	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)?	Do you have internal/in house engineering specialist oversight of this facility? Or do you have external engineering support for this purpose?	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?	Is there a) a closure plan in place for this dam, and b) does it include long term monitoring?	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?	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.
			East	North	Active	Inactive			Upstream	Downstream	Center Line													
MINSUR	SAN RAFAEL	DIQUE B3-B2.5	357,487	8,423,873	Yes	-	2004	Yes	-	-	Yes	85.00	9,869,000.00	13,578,000.00	February, 2019	Yes	Extreme	CDA (Canadian Dam Association)	No	Yes, both	Yes, November 2017	a) Yes and b) Yes	Yes	
TABOCA	PITINGA CONCENTRACIÓN ROCHA SÁ	DIQUE A1	825,138	9,918,357	Yes	-	1997	Yes	-	Yes	-	35.00	44,283,000.00	53,380,000.00	March, 2019	Yes	Extreme	CDA (Canadian Dam Association)	No	Yes, both	Yes, update analysis currently in progress	a) Yes and b) Yes	Yes, January 2019	
TABOCA	PITINGA CONCENTRACIÓN ROCHA SÁ	DIQUE PAU D'ARCO	824,148	9,916,240	Yes	-	1997	Yes	-	Yes	-	18.00	0.00	1,360,000.00	March, 2019	Yes	High	CDA (Canadian Dam Association)	No	Yes, both	Yes, update analysis currently in progress	a) Yes and b) Yes	Yes	
TABOCA	PITINGA CONCENTRACIÓN ROCHA SÁ	GROTA A	822,519	9,917,495	Yes	-	1997	Yes	-	Yes	-	7.00	44,283,000.00	53,380,000.00	March, 2019	Yes	Extreme	CDA (Canadian Dam Association)	No	Yes, both	Yes, update analysis currently in progress	a) Yes and b) Yes	Yes	Same basin of tailings from dam A1
TABOCA	PITINGA CONCENTRACIÓN ROCHA SÁ	GROTA B	822,748	9,917,291	Yes	-	1997	Yes	-	Yes	-	11.00	44,283,000.00	53,380,000.00	March, 2019	Yes	Extreme	CDA (Canadian Dam Association)	No	Yes, both	Yes, update analysis currently in progress	a) Yes and b) Yes	Yes	Same basin of tailings from dam A1
TABOCA	PITINGA CONCENTRACIÓN ROCHA SÁ	GROTA C	823,345	9,917,037	Yes	-	1997	Yes	-	Yes	-	10.00	44,283,000.00	53,380,000.00	March, 2019	Yes	Extreme	CDA (Canadian Dam Association)	No	Yes, both	Yes, update analysis currently in progress	a) Yes and b) Yes	Yes	Same basin of tailings from dam A1