Adherence to the Global Industry Standard on Tailings Management (GISTM)

Minsur has proactively worked over the last 3 years to implement the ICMM’s Global Industry Standard on Tailings Management (GISTM), which was issued in August 2020. It was done in line with our ‘zero harm’ goal. We have completed a gap analysis in compliance with the standard requirements, and we have prepared adherence plans to both the GISTM and our own Infrastructure Management Standard (IMS). These guidelines establish our general framework to prepare plans, procedures, actions and controls to ensure safety in our operations. It is worth mentioning that in the past three years we did not have any material incidents in our tailings and mining waste infrastructures.

Our mining units have a surveillance process to periodically monitor our tailings facilities’ health. Thus, we operate safely, and we focus on making preventive decisions, which help us to improve our operating controls and governance in line with the global industry standard on tailings management.

This document is a voluntary statement, considering that to date we do not have any tailings facility with a consequence classification of ‘Extreme’ or ‘Very High’. Consistent with our transparency policy and our adherence to the International Council on Mining and Metals (ICMM), we present hereby the progress made in adapting our tailings infrastructures to meet the 77 requirements of the global industry standard on tailings management, GISTM. The data herein is the result of self-assessments carried out against such requirements, considering the knowledge base of our tailings facilities, its current conditions, the risk analysis, and other aspects related to governance and third-party engagement in tailings facilities, as well as Minsur’s internal processes.

Unless otherwise specified, these data are supported by the available information on the date it was issued. It is important to consider that the data and points of view presented herein may change, or could be modified due to additional information, changes in circumstances or other events. Therefore, they shall not be deemed as recommendations or forecasts made by Minsur.

This statement refers to operating tailings facilities of Minsur’s mining units, which include San Rafael MU (Puno, Peru), Mina Justa (Ica, Peru) and Pitinga MU (Manaos, Brasil).

As of June 2023, Minsur has achieved an overall level of compliance of 89% amongst all of its tailings facilities, considering both the total and partial categories. Significant progress has been made when compared to our prior review, conducted at the end of 2021 (which established 73% of progress in the same categories). Thus, we are on track to meet our implementation plan for 2025.

San Rafael Mining unit
San Rafael MU is an underground mine that started operations in 1977. Currently, it produces 12% of the world’s tin; it processes cassiterite ore (SNO2) at a rate of 2,830 tonnes/day, with an average head grade of 2.65% Sn and an 89% recovery rate.

The unit has two operating tailings deposits: B3 and B4. Implementing proper actions to meet the GISTM requirements has been our priority over the last three years, and we have made great progress...
at all our facilities. To fulfill our commitment with the GISTM and continuously improve our tailings management, in 2022 we reassessed our implementation plans, confirming that we are on track to meet the August 2025 GISTM timeline.

To date, San Rafael has reached an overall level of compliance of 85%, considering both the total and partial categories, with 61% in the full compliance category and 24% in the partial or "in process" compliance category. Furthermore, there are 2 requirements not applicable to this unit.

**B3 Tailings dam**
The B3 tailings facility was designed by Knight Piésold, and it was built meeting the highest engineering and safety standards. Over the past years, we have implemented a tailings management system to ensure compliance with the highest standards.

The B3 tailings dam is located downstream, south of the Chogñacota basin. Tailings from San Rafael and the B2 plant are disposed in this facility, using spigots from the crown of the B3 main embankment. Currently, the main dyke of the B3 tailings dam is at 4,490 m.a.s.l., with a storage capacity of 4.2 Million tonnes. Furthermore, the design includes a freeboard no less than 2 m high and a beach that is no less than 300 m long. The main dyke is no more than 80 m high and is approximately 440 m long.

In terms of governance, and under the GISTM, the following team is responsible for managing the B3 tailings deposit:

> Accountable executive: Alberto Cárdenas (Chief Operating Officer)
> Responsible tailings facility engineer: Ángel Pinto (Plant Superintendent)
> Engineer of record: Rubén Vargas (Knight Piésold consulting engineer)
> Independent Geotechnical Review Board (IGTRB): Committee comprised by consulting engineers: Richard Davidson, Leslie Smith and Sergio Barrera.

Complying with the GISTM, our tailings management team works closely with technical experts and specialized consultants.

**B4 tailings dam**
The B4 tailings dam was designed by Knight Piésold and is being built using the centerline raising method, under the highest engineering and safety standards.

The B4 tailings dam is located 2km downstream of the B3 dam, located in the Chogñacota valley. Currently, the dam has been operating for a year, storing tailings from the San Rafael and the B2 plants, and just completed its second raise at 4,342 m.a.s.l. The dam is 57m high. Following the design, we are currently under construction of the third raise at 4,350 m.a.s.l., to reach an expected storage capacity of 2.91 Million cubic meters.

Similar to the B3 tailings dam, the team responsible for managing the B4 tailings dam under the GISTM is listed below:
The unit has two operating tailings deposits: B3 and B4. Implementing proper actions to meet the grade of 2.65% Sn and an 89% recovery rate.

San Rafael MU is an underground mine that started operations in 1977. Currently, it produces 12% of San Rafael Mining unit facilities, considering both the total and partial categories. Significant progress has been made when they shall not be deemed as recommendations or forecasts made by Minsur. It is important to consider that the data and points of view presented herein may change, or unless otherwise specified, these data are supported by the available information on the date it was current.

In terms of governance, and under the GISTM, the following team is responsible for managing the B3 tailings facility:

- Accountable Executive: Alberto Cárdenas (Chief Operating Officer)
- Responsible tailings facility engineer: Ángel Pinto (Plant superintendent)
- Engineer of record: Rubén Vargas (Knight Piésold consulting engineer)
- Independent Geotechnical Review Board (IGTRB): Committee comprised by consulting engineers: Richard Davidson, Leslie Smith and Sergio Barrera.

According to the GISTM, since the beginning of operations in 2022, our tailings management team, similar to what happens with the B3 tailings dam, works closely with technical experts and specialized consultants.

**Mina Justa mining unit**

Mina Justa is located 500 km south of Lima and 35 km away from the district of San Juan de Marcona (Ica region). It is an open-pit copper deposit with a processing capacity of 6 Million tonnes per year for sulfides and 12 Million tonnes for oxides.

The mine started commercial operations in August 2021, and it is comprised of a superficial copper oxide layer and a massive deep body of copper sulfides. Oxides are treated through VAT leaching and a conventional SX/EW process to produce high purity copper cathodes. Sulfides are treated through a conventional concentration process.

**Mina Justa tailings dam**

Mina Justa tailings dam was designed by Knight Piésold. Construction of the starter dam was completed in 2021 under the highest engineering and safety standards. Since its inception, a world-class tailings management system is in place.

Mina Justa tailings dam is located in the western area of the pit. It receives tailings from the sulfide plant through spigots from the main dyke. Currently, the main dyke of the Mina Justa tailings dam is at 755 m.a.s.l., and it has a storage capacity of 103 Million tonnes. Furthermore, the design includes a freeboard no less than 2m high and a beach that is no less than 300 m long. The western dyke is no more than 15.26 m high and approximately 780 m long.

In terms of governance, the team responsible for managing the Mina Justa tailings dam under the GISTM is listed below:

- Accountable Executive: Pedro Ticona (Chief Operating Manager).
- Responsible tailings facility engineer: Ruben Zevallos (Plant manager).
- Engineer of record: Rubén Vargas (Knight Piésold consulting engineer).
- Independent Geotechnical Review Board (IGTRB): Committee comprised by the consulting engineers: Richard Davidson, Leslie Smith and Sergio Barrera.

Complying with the GISTM, our tailings management team works closely with technical experts and specialized consultants.

To date, Mina Justa has reached an overall level of compliance of 91%, considering both the total and partial categories, with 43% in the full compliance category and 47% in the partial or “in process” compliance category. Furthermore, there are 3 requirements not applicable to this unit.
Pitinga Mining Unit

Pitinga is a mining-industrial/metallurgical complex that belongs to our subsidiary company Mineração Taboca. It is located approximately 300 km away from Manaus, the Amazonas state capital. The mine is accessed taking the BR-174 highway, which connects Manaus/AM with Boa Vista/RR, up to kilometer 249, and then taking secondary roads for other 40 km.

The Pitinga mine is a quarry from which cassiterite has been mined for over 40 years. Columbite is also mined at this site, a material used to produce Niobium and Tantalum metallic alloys. Pitinga’s annual production reaches approximately 7,000 tonnes of Sn in concentrates and 4,000 tonnes of NbTa ferroalloys.

Rocha Sa and UBM tailings dam system

In terms of governance, the team responsible for managing the tailings dam system under the GISTM is listed below:

>Accountable Executive: Eduardo Orban (Chief Operating Officer)
> Responsible tailings facility engineer: Tutimes Tavares (Barragens Manager)
> Engineer of record (EoR): João Paulo Costa Andrade (HidroBR Consultoria LTDA technical manager)
> Independent Geotechnical Review Board (IGTRB): Committee comprised by the consulting engineers: Richard Davidson, Michael Hendron, Garry Stevenson, Gabriel Fernandez and Sergio Barrera.
> Responsible designer: Michel Fontes (Fonntes Geotécnica LTDA CEO)

To comply with GISTM, our tailings management team works closely with technical experts and specialized consultants.

Implementation of the GISTM in Pitinga started in 2022 with an action plan to meet the GISTM requirements by 2025. Significant improvements have been made to date with construction activities mainly carried on during 2023. Progress to date confirms that we are on track to fully comply by 2025.

To date, Pitinga has reached an overall level of compliance of 89%, considering both the total and partial categories, with 36% in the full compliance category and 53% in the partial or “in process” compliance category. There are 2 requirements not applicable to this unit. Furthermore, these tailings facilities have reached the ALARP condition as per Brazilian regulations.

Minsur’s tailings infrastructures have been designed and built under the highest engineering and safety standards. Over the last year, we have strengthened our tailings management systems to ensure the integrity and good governance of all these infrastructures.

Our priority is to ensure the safety of our employees, the neighboring communities, and the environment. Therefore, we make sure that proper risk mitigation measures are taken, and regular training is provided to ensure safe tailings management and operations.

We remain committed to ongoing improvement and the implementation of innovative practices for tailings management. Our goal is to meet and exceed the GISTM requirements, thus becoming leaders in the adoption of the best practices in the mining industry.