

GISTM Public Disclosure Report

Candelaria Mine Candelaria Tailings Storage Facility

August 2025

1. Introduction

Lundin Mining is committed to the implementation of the Global Industry Standard on Tailings Management (GISTM) at its Candelaria Copper Mining Complex ("Candelaria") in Chile, which includes one active tailings facility known as Los Diques, and five inactive/closed tailings facilities. Principle 15 of the GISTM requires public disclosure and access to information about the tailings facility to support public accountability. This disclosure document is focused on the inactive Candelaria tailings facility. It has been prepared in accordance with the requirements of Principle 15 of the GISTM and reviewed by Lundin Mining's Accountable Executive.

2. Tailings Storage Facility Description

The Candelaria Tailings Storage Facility (TSF) is an inactive facility that is part of the Candelaria Copper Mining Complex. The Candelaria Copper Mining Complex comprises two adjacent copper mining operations, Candelaria, and Ojos del Salado, that produce copper concentrates from an open pit and underground mines. Candelaria is indirectly owned by Lundin Mining (80%) and Sumitomo (20%). Candelaria is an open pit and underground mining operation providing copper ore to two on-site processing plants with capacities of approximately 75,000 tonnes per day (tpd) and 3,800 tpd.

Candelaria is located in Chile's Atacama Region (Region III) within an active seismic zone, at an elevation of approximately 650 meters above sea level (masl) and 20 km south of the city of Copiapó. Copiapó has a desert climate with mild temperatures year-round. Winters are mild with warm temperatures; mid-winter maximums in July reach approximately 20°C. Winter nighttime temperatures average approximately 7°C. Summers are warm with a January average of 22°C. Annual precipitation is approximately 17 mm, of which the majority falls in the winter months.

The inactive Candelaria TSF is located to the north-west of the open pit. This facility received tailings from the Candelaria processing plant between 1994 and 2019. The Candelaria TSF and associated seepage control system is located in the Quebrada El Rorro. The seepage control system is immediately upstream from the confluence with Quebrada El Bronce and about 1,450 masl downstream of the Main Dam's (Muro Principal) starter embankment upstream toe area. Quebrada El Bronce in turn discharges to the Copiapó River approximately 1,750 masl downstream from its confluence with Quebrada El Rorro.

In 1997, the expansion of the Candelaria TSF was approved increasing the storage capacity to meet mine growth plans. In 2012, Candelaria obtained permits for increasing storage capacity within the existing impoundment by raising the dam crest eight meters to 800 masl. Later, in 2016, Candelaria obtained another permit for additional storage capacity without any further dam crest raising above 800 masl. This additional storage capacity was obtained by reducing the freeboard from five meters to 1.5 m while maintaining the necessary freeboard to manage extreme precipitation and seismic events.

Tailings from the Pedro Aguirre Cerda (PAC) milling operation (up to 3,800 tpd) were also discharged in the Candelaria TSF impoundment through a single discharge point on the abutment separating the Main Dam and the North Dam. Tailings excavated as part of Candelaria's San Esteban 2 TSF closure were mechanically placed within the Candelaria TSF impoundment. The tailings were placed upstream of the Main Dam in the tailings beach area near the left abutment.

The Candelaria TSF has three embankment dams (Main, North and South), constructed with mine waste material with a final designed crest elevation of 800 masl. Construction of the final dam configuration was completed in 2015. The dams have a filter system comprised of varying combinations of granular material, geotextile and/or geomembrane liner on the upstream slope.

The Candelaria TSF will ultimately be closed and reclaimed in accordance with the approved closure concept. The currently approved closure concept was developed in 2015 and contemplates construction of a 30 cm thick rockfill closure cap, seepage control system closure works, plus storm water management features that would include runoff control

ditching, a storm water surge pond on the concave shaped tailings impoundment surface, plus an emergency overflow spillway.



Figure 1: Candelaria Tailings Storage Facility

3. Consequence Classification

The consequence of failure classification for the tailings facility is determined by assessing the downstream conditions and selecting the classification corresponding to the highest Consequence Classification from the following incremental loss categories: potential population at risk, potential loss of life, environment, health, safety, cultural, and infrastructure and economics.

The GISTM Consequence Classification for the Candelaria TSF was determined and documented after conducting a series of hypothetical breach analyses considering credible failure modes and scenarios. The Consequence Classification of the Candelaria TSF is 'Extreme' according to the system defined within the GISTM.

4. Summary of Risk Assessment Findings

Lundin Mining applies a risk-informed decision-making approach for all TSF lifecycle phases. Risk assessments are used to identify and evaluate risks to prevent catastrophic failures, and to inform decisions to manage risks to as low as reasonably practicable (ALARP). This approach focuses on credible failure modes and to reduce the risks at our facilities by reducing the likelihood of occurrence and/or downstream impacts, regardless of the consequence classification.

The most recent risk assessment for the Candelaria TSF was conducted in 2023 by an external independent facilitator with participation from a multidisciplinary site team and the Engineer or Record (EOR). The risk assessment included a semi-quantitative Failure Mode and Effects Analysis (FMEA). As part of this assessment, potential failure modes were deemed as credible or non-credible regardless of their likelihood, and then the risk of credible failure modes was evaluated. All failure modes were sorted according to Lundin Mining's risk management framework, with risk mitigation controls identified and tracked.

The results of the risk assessment indicate the credible failure modes (dam slope instability, dam foundation failure, and overtopping) for the current TSF configuration, along with their controls and mitigation measures. The risk assessment methodology and results were reviewed by the Independent Tailings Review Board (ITRB) in 2023.

Following the FMEA risk assessment workshop, additional risk mitigation measures were identified to achieve ALARP through either reducing likelihood or consequences to people and the environment. A total of 20 ALARP measures were shortlisted with 14 of these measures already included in future design configurations. The other six measures will undergo further evaluations in 2025.

5. Summary of Impact Assessments and of Human Exposure and Vulnerability to Tailings Facility Credible Flow Failure Scenarios

Hypothetical dam breach analyses and inundation studies have been conducted for the Candelaria TSF to identify potentially impacted areas and waterbodies in the extremely unlikely event of a tailings breach. Potentially affected areas primarily include local roads and/or highways, third-party infrastructure, and Candelaria's open pit mining operations. No urban areas, rural villages, or indigenous territories will be directly impacted by a potential dam failure. The controls and mitigations that have been implemented to reduce the likelihood and consequences of credible tailings facility failure scenarios for the Candelaria TSF were defined during the risk assessment.

6. Description of the Design for all Phases of the Tailings Facility Lifecycle

The Candelaria tailings are impounded by three principal dams: Main Dam, South Dam and North Dam. The starter dam for the Main Dam is approximately 800 m long, with a crest elevation of 680 masl. The upstream toe of the dam is located at approximately 640 masl in the central part of the valley. The lowest ground surface elevation under the dam crest footprint is 631 masl, which results in a maximum starter dam height of 49 m. Foundation preparation for the starter dam consisted of removing three to four meters of soil in the central part of the valley. The ultimate Main Dam is approximately 2,350 m long and 170 m high, with a 20 m wide crest at elevation 800 masl. The original design included a freeboard of four meters during operation and five meters for closure. Revised operating permits allowed a lower freeboard of 1.5 m while maintaining capacity within the impoundment to contain the 24 hour duration Probable Maximum Precipitation (PMP).

The principal tailings dams (Main, South and North) consist of zoned rockfill and were raised using the downstream construction method. The dams were designed with an overall upstream slope of 1.8H:1V (horizontal: vertical) and downstream slope of 1.6H:1V. However, to facilitate placement of the rockfill, the upstream slope design was modified by creating a stepped slope with benches at about 16 m vertical. The interbench slope is at about 1.6H:1V.

The tailings dams were in operation since 1994. Original project specifications for the rockfill in the Main, South and North dams required a maximum lift thickness of two meters, a maximum particle size of two meters, and not more than five percent (%) finer than the No. 200 sieve (0.075 mm). The original design included a two-stage filter comprised of a filter layer and a drain layer, each 1.5 m thick, measured perpendicular to the slope, placed on the upstream slope to prevent migration of the fine tailings particles into the rockfill voids by internal erosion. The filter layer consisted of sand and the drainage layer consisted of gravel.

In 1998, a geotextile was introduced to replace the two-stage granular filter. Specific recommendations were provided for careful control of the granular filter and geotextile placement. Those recommendations included replacing the filter and drainage layers with a non-woven geotextile placed on a one meter thick prepared rockfill subgrade and covered with a protective layer consisting of gravel. In 2010, an alternative design solution for the protective cover over the geotextile was implemented. This included using a geomembrane instead of the soil cover over the geotextile. This alternative design solution was implemented for the Candelaria tailings impoundment dam raising from 792 to 800 masl.

A drainage system was constructed in the foundation of the tailings dams. For the Main Dam, the drainage system consists of a central drain aligned parallel to the valley and five lateral drains on either side that form a herringbone pattern. The drains were placed in trenches ranging between 1.5 and 2.3 m deep and 2 to 5 m wide. The trenches were backfilled with drainage material. The central drain continues downstream from the dam along the valley and connects to the seepage control system.

The seepage control system of the Main Dam is about 1,450 m downstream of the upstream toe of the starter dam. The system consists of a cutoff wall across Quebrada El Rorro and perforated drainage pipes immediately upstream from the cutoff wall. The water intercepted in the drainage pipes is conveyed by gravity through a tunnel that discharges to a shaft. During operations, recovered seepage water was pumped to the decant pond in the tailings impoundment. Additionally, the South Dam and the North Dam have drains beneath the dams and seepage recovery ponds downstream of the dams.

7. Summary of Material¹ Findings of Annual Facility Performance Review and Dam Safety Review (DSR)

The most recent independent DSR for the Candelaria TSF was completed in 2023. The DSR concluded that there were no immediate dam safety concerns for the Candelaria TSF. Four recommendations were made including improvements to the instrumentation monitoring system and updates to the stability analyses.

The last Candelaria TSF Performance Review was performed by the EOR in 2024. No significant risks were identified based on the site visit inspections and review. There were no major variations in the instrumentation monitoring data or activation of Trigger Action Response Plans (TARPs) in 2024.

8. Summary of Material Findings of the Environmental and Social Monitoring Program

Our operations are subject to environmental regulations in the various jurisdictions in which we operate. Permitting, approvals and compliance management are important for the effective regulation of mining-related activities to prevent possible adverse impacts on the natural environment, as well as to protect the interests and rights of local communities. There were no material environmental incidents associated with the Candelaria TSF from the 2024 environmental monitoring program.

Lundin Mining's approach to stakeholder engagement is based on clear communication, transparency, and trust. Our goal is to better understand and respond to the interests and concerns of our stakeholders and any emerging issues and risks to our operations. The Responsible Mining Policy (RMP) and Responsible Mining Management System (RMMS) set the framework for a consistent approach to engaging with stakeholders across our organization. We use insights gained from the Social License to Operate (SLO) Index to identify stakeholders and engage on perceived and actual impacts. The SLO is not a one-time achievement; it can vary over time and therefore needs to be constantly maintained. Since 2018, the Candelaria operation engaged an independent third-party to measure the SLO Index. To better integrate social performance in the internal decision-making process on TSF operations and emergency planning, a set of questions covering the community perception on the TSF was included in the quarterly perception surveys. There were no material findings associated with the Candelaria TSF from the 2024 social monitoring program.

9. Summary of the Tailings Facility Emergency Preparedness and Response Plan (EPRP)

The Candelaria TSF Emergency Manual is maintained and includes specifications to prepare and manage (eliminate or mitigate) consequences after an event such as an emergency associated with the tailing facility. The last update of this EPRP was in 2024. The emergency measures are based on the most recent dam breach and inundation study. The emergency manual presents procedures for the detection, assessment and classification of emergency situations, actions

¹ Material findings are defined as unacceptable tailings facility risks such as a dam safety issue considered immediately dangerous to life, health or the environment, or a significant risk of regulatory enforcement.

expected for each level of emergency, in addition to a training plan for emergency preparedness. The emergency manual is tested and updated at all phases of the tailings facility lifecycle. It is shared with relevant stakeholders who are involved with emergency response planning.

10. Independent Reviews

The Independent Tailings Review Board (ITRB) for the Candelaria TSF was established in 2022. The ITRB program includes an annual site visit, supplemented by follow-up online progress meetings as needed. The last ITRB site visit was completed in June 2025. The next ITRB site visit and review is scheduled for June 2026.

In accordance with the GISTM, the Independent DSR for the Candelaria TSF is set as every five years, consistent with its 'Extreme' consequence classification. The next independent DSR is planned in 2028.

11. Financial Capacity

Lundin Mining confirms that it has sufficient financial resources to meet its business requirements for the planned closure, early closure, reclamation, and post-closure of the Candelaria TSF and its appurtenant structures. These costs are disclosed annually in aggregate form in our financial statements contained within our [Annual Management's Discussion & Analysis \(MD&A\) Report](#). Further, Lundin Mining maintains insurance for the Candelaria TSF to the extent commercially reasonable and available.

12. Management System Reviews and Audits

Candelaria is implementing the Lundin Mining RMP through the RMMS, which includes 16 requirements. The RMMS specifies Company-wide requirements for managing health, safety, environmental and community (HSEC) aspects of our business. The last external RMMS audit at Candelaria was conducted in 2024 with action plans developed to close identified gaps. Candelaria is currently in full conformance with 77% of all RMMS requirements and the remaining 23% is at least partially met with a plan in place.

In support of GISTM implementation, Lundin Mining has developed a corporate guideline for the development of a site-specific performance-based Tailings Management System (TMS). A TMS self-assessment was carried out in July 2024 at Candelaria. The self-assessment results indicated that several components of the TMS already exist at the site level. The percentage of alignment to the TMS guideline was 53%. A formal internal review of the defined site-specific TMS document is planned for late 2025.

13. GISTM Conformance

Lundin Mining has assessed conformance on the GISTM for the inactive Candelaria TSF in accordance with the ICMM Conformance Protocols issued in May 2021. For the inactive Candelaria TSF, all GISTM requirements have been met and verified as fully aligned through self-assessment.