Escondida – Laguna Seca TSF Drainage System (main and laterals)

- Dam crest width 10 metres (minimum).
- Upstream slope is 2:1, downstream slope 4:1

Tranque Los Quillayes (The Quillayes tailings dam at Minera Los Pelambres)

- Diversion channel for water management
- Online monitoring in place
- Emergency spillway to evacuate water
- Water recirculation system with capacity of 1100 litres/s

Tailings transported from the concentrator by two 49km pipelines (either pumped or by gravity)

- HDPE Geomembrane lining on upstream embankment slope
- Dam wall construction based on cycloned sand tailings
- Operating life based on current mine plan until 2035
- Dam crest width 10 m (minimum).
- Maximum wall height: 237 metres
- Authorised Capacity: 1,700 Mtons (Approval by RCA38 2004)

Key Facts:
1. “Tailings Dam” Name/identifier: PDF-3
2. Location: Chile
- Non-Managed Joint Corporation (10%),
- Kawasaki Heavy Industries Corporation (10%),
- Mitsubishi Materials Mining & Metals Corporation (15%),
- Mitsubishi Materials Mining & Metals indirectly by JX Nippon Mining and Metals.
3. Ownership: Active, Active, Active, 2009.1.1, operation
4. Downstream depression)
5. Height: 302 m
6. Volume: 419,120,091 m3
7. Volume of Tailings Storage: 676,100,000 m3
8. Time of Start of operation: 2018
9. Time of Start of operation: 2017
10. Authorised Capacity: 1,700 Mtons
11. Hazard Classification: Very High
12. Impacts: Reputation, Financial
13. Impact: Severe (scale – Very Unlikely, Possible, Likely)
15. Risk Level: High, based on theoretical impact
16. Internal stability concerns, as identified following theoretical analysis by an independent engineer (members of the Board are Richard Davidson, Gordon Davidson, and Richard Davidson).
17. Deformation Study are being conducted by Knight Piésold.
19. Final conditions?
20. Has a formal analysis of the impact for this dam, and b) does this assessment take place? or do you plan to do it in the future?

We have both, an in-house engineering specialist and an external engineer who inspects the site on a permanent basis) and a Senior Tailings Engineer (on a daily basis).

We have both, an in-house engineering specialist and an external engineer of Record (in accordance with Chilean legislation). We have both, an in-house engineering specialist and an external engineer.

Both firms).

Yes.

The Engineer in charge conducted it in 2018.

We followed the theoretical approach and the final conditions.

Yes.

This assessment is planned for 2020.

The Dam Safety Review in 2018 recommended the change on the water management system.