



21 June 2019

Overview of Fresnillo's Tailings management system:

Introduction

As at June 2019, Fresnillo plc ("Fresnillo") manages eleven tailings dams, of which five are operational, five are non-operational and one is under construction, all in Mexico. Of these eleven dams, five are constructed using the downstream method, with the remaining six using the upstream method. All of the dams are constructed in accordance with the geomorphological and seismic conditions. Some of these dams are sub-divided into 'cells', as can be seen in more detail in the tables provided below.

All Fresnillo plc's tailings dams are specifically designed to meet the demands of the mine site, while also ensuring the strictest of safety and environmental standards. To date, there have been no significant environmental accidents at any of our tailings facilities.

The recent disaster in Brazil has led to increased focus on the issue of tailings dam safety across the global mining industry. While the safe management of our tailings facilities has always been a priority for Fresnillo, we have taken the opportunity to renew this focus, and to conduct a thorough review of our tailings facilities and processes. We are pleased to set these out in more detail below.

Pre-construction approval

Before the construction of a new tailings facility, an Environmental Impact Assessment (EIA) composed of a series of detailed studies is carried out to confirm that an area is suitable. The EIA takes into account a very wide series of considerations including geotechnical, geological, geophysical, hydrological and seismic analysis, as well as the provision for, and safe management of, any required tailings facilities. Once complete, these are presented to the SEMARNAT (Secretariat of Environment and Natural Resources) and the CNA (National Commission for Water) for approval.

The Mexican tailing dam safety requirements, which Fresnillo follows are in-line with the standards set in the United States of America, Canada and Chile.

On-going regulatory and management compliance

The CNA itself then undertakes various studies prior to construction of the tailings facility and continues to periodically review dams in relation to environmental impacts, on an ongoing

basis. Fresnillo continues to hold all relevant permits for its tailings facilities, showing its strict continued adherence to the required standards.

In addition to this regulatory oversight (namely pre-construction approval and on-going permitting), Fresnillo's individual mine site management teams also conduct thorough internal and third party reviews for all tailing dams within the Group. These internal reviews comprise of collecting and analysing measurement readings on a regular basis, undertaking slope stability analysis, as well as carrying out mass movement analysis in the event of failure. These detailed reports are submitted directly to the COO, who in turn informs the Company Board as part of our continued compliance.

This active management of the tailings facilities continues throughout their use and after their decommissioning. For example, third party assessments are commissioned to conduct a design stability assessment before a tailings dam is approved for an increase in capacity, and to carry out regular tests throughout the lifetime of the dam.

To that end, Fresnillo can confirm that all tailings facilities were independently peer reviewed in 2016, including undergoing mass movement scenario analysis at all units. These assessments were conducted by the consulting company ICOPRES (Ingeniería y Construcción de Presas).

Further Independent Programmes

More recently, two independent specialists, Wood plc and Robertson GeoConsultants were commissioned to review and update our Tailings Dams Governance System and perform Dam Safety Inspections of all our dams, alongside the periodic CNA reviews. Wood plc was tasked with reviewing the physical integrity of the dams, while Robertson GeoConsultants is focusing on the management and governance of the dams. These independent reviews of the dams began this year and are currently on-going, due to be finalised by mid-2020.

Though not required under current legislation, Fresnillo took the decision to implement the Tailings Dams Governance System and Dam Safety Inspections, among other best practices and international standards, to ensure continued third party oversight of all our tailings facilities. Implementation of these programmes will complement both the continued regulatory compliance, and also the internal auditing process already in place as detailed above.

Fresnillo Mine

1: "Tailings Facility" Name/Identifier

Fresnillo TSF.

This upstream deposit is divided into seven cells;

- a. Antiguo.
- b. Sanjón.
- c. Chinos.
- d. Sección II.
- e. Emergencia.
- f. Beleña.
- g. San Luis.

2: Location

- a. 102°51'46.22"W, 23°09'40.73" N
- b. 102°51'31.01"W, 23° 9'45.68" N
- c. 102°51'31.01"W, 23° 9'27.83" N
- d. 102°51'41.58"W, 23° 9'30.30" N
- e. 102°52'1.66"W, 23° 9'36.99" N
- f. 102°51'37.34"W, 23° 9'18.04" N
- g. 102°51'42.71"W, 23° 8'52.16" N

3: Ownership

Minera Fresnillo. S. A. de C. V.
Unidad Fresnillo.
Fresnillo plc

4: Status

- a. Closed.¹
- b. Closed.
- c. Inactive.²
- d. Closed.
- e. Inactive.
- f. Inactive.
- g. Active.

5: Date of initial operation

- a. 1953.
- b. 1963.
- c. 1988.
- d. 1973.
- e. 1963
- f. 1999.
- g. 2006

6: Is the Dam currently operated or closed as per currently approved design?

Yes

7: Raising method

Upstream.

¹ A closed dam means there is no plan to re-open it.

² An inactive dam means it could be operated again in the future.

8: Current Maximum Height	a. 25 m. b. 25 m. c. 30 m. d. 37 m. e. 8 m. f. 34 m. g. 38 m.
9: Current Tailings Storage Impoundment Volume	a. 1,593,200 m ³ b. 11,521,900 m ³ c. 7,543,200 m ³ d. 1,487,000 m ³ e. 718,900 m ³ f. 19,292,000 m ³ g. 17,591,240 m ³ *As of March 2019
10: Planned Tailings Storage Impoundment Volume in 5 years time	28,880,000 m ³ *As planned for January 2024
11: Most recent Independent Expert Review	ICOPRES - March 2019.
12: Do you have full and complete relevant engineering records including design, construction, operation, maintenance, and/or closure?	Yes
13: What is your hazard categorisation of this facility, based on the consequence of failure?	Low. It is categorised in accordance with the geomorphological and seismic conditions.
14: What guideline do you follow for the classification system?	Classification of the risk according to the risk (US Army Corps of Engineers), mass movement by failure.
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).	No
16: Do you have internal/in house engineering specialist oversight of this facility? Or do you have external engineering support for this purpose?	Both
17: Has a formal analysis of the downstream impact on communities,	Yes, in 2018 by ICOPRES.

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?

18: Is there a) a closure plan in place for this dam, and b) does it include long term monitoring?

There is no closure plan for the active dams yet, however long-term monitoring is considered.

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

20: Any other relevant information and supporting documentation.

Nothing

Saucito

1: "Tailings Facility" Name/Identifier	Saucito TSF. This upstream deposit is divided into four cells; today, the first two; I & II, are non-operational and in the process of being closed. The third, (III) is in operation and the forth, (IV) is being prepared.
2: Location	102° 55' 40.61" W, 23° 07' 25.19" N
3: Ownership	Minera Saucito, S. A. de C. V. Unidad Saucito. Fresnillo plc.
4: Status	Active
5: Date of initial operation	April 2011
6: Is the Dam currently operated or closed as per currently approved design?	Yes
7: Raising method	Upstream
8: Current Maximum Height	55m
9: Current Tailings Storage Impoundment Volume	11,547,224 m ³ *As of March 2019
10: Planned Tailings Storage Impoundment Volume in 5 years time	22,747,224 m ³ *As planned for January 2024
11: Most recent Independent Expert Review	ICOPRES - Abril 2019.
12: Do you have full and complete relevant engineering records including design, construction, operation, maintenance, and/or closure?	Yes
13: What is your hazard categorisation of this facility, based on the consequence of failure?	Low. It is categorised in accordance with the geomorphological and seismic conditions.
14: What guideline do you follow for the classification system?	Classification of the risk according to the risk (US Army Corps of Engineers), mass movement by failure.
15: Has this facility, at any point in its history, failed to be confirmed or certified	No

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).

16: Do you have internal/in house engineering specialist oversight of this facility? Or do you have external engineering support for this purpose?	Both
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?	Yes, in 2017 and it will be repeated this year.
18: Is there a) a closure plan in place for this dam, and b) does it include long term monitoring?	Yes Yes
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
20: Any other relevant information and supporting documentation.	Nothing

Ciénega.

1: "Tailings Facility" Name/Identifier	Ciénega TSF Consists of two downstream deposits, and one under construction: Deposit I - In operation. Deposit II - Non-operational and being prepared for closure. Deposit III - Currently being constructed.
2: Location	Deposit I 25° 03' 10.95"N 106°30' 00.4"W Deposit II 25° 02' 20.03" N. 106° 20' 19.90 W Deposit III 25° 02' 02.74" N 106° 19' 47.223 W
3: Ownership	Minera Mexicana La Ciénega, S. A. de C. V. Unidad La Ciénega. Fresnillo plc.
4: Status	Deposit I in operation, expansion of dam undertaken recently. Deposit II Non-operational and being prepared for closure. Deposit III Currently being constructed.
5: Date of initial operation	Deposit I October 1994. Deposit II March 2010. Deposit under construction.
6: Is the Dam currently operated or closed as per currently approved design?	Deposit I Yes. Deposit II Yes. Under construction.
7: Raising method	Deposit I Downstream Deposit II Downstream. Downstream construction.
8: Current Maximum Height	Deposit I 104 m Deposit II 80 m Deposit III 77 m
9: Current Tailings Storage Impoundment Volume	Deposit I. 7,798,900 m ³ . Deposit II. 10,065,900 m ³ Deposit III. Under construction *As of March 2019

10: Planned Tailings Storage Impoundment Volume in 5 years time	Deposit I 8,660,000 m ³ Deposit II 10,065,900 m ³ Deposit III 3,444,500 m ³ *As planned for January 2024
11: Most recent Independent Expert Review	Deposit I. – SRK - October 2017. Deposit II. - SRK - October 2017 Deposit III. - SRK - October 2017
12: Do you have full and complete relevant engineering records including design, construction, operation, maintenance, and/or closure?	Yes
13: What is your hazard categorisation of this facility, based on the consequence of failure?	Deposit I. Does not have a risk categorisation. Deposit II. Does not have a risk categorisation. Deposit III. Does not have a risk categorisation.
14: What guideline do you follow for the classification system?	None, for any of the deposits
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).	No
16: Do you have internal/in house engineering specialist oversight of this facility? Or do you have external engineering support for this purpose?	Both
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?	Deposit I. A mass movement analysis has been undertaken. ICOPRES. Deposit II. A mass movement analysis has been undertaken. ICOPRES. Deposit III. This project does not have one.
18: Is there a) a closure plan in place for this dam, and b) does it include long term monitoring?	Deposits I & II a) Yes. b) No.

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

20: Any other relevant information and supporting documentation.

Nothing

San Julián

1: "Tailings Facility" Name/Identifier	San Julián TSF. One downstream tailings deposit.
2: Location	26° 02' 30.5" N 106° 30' 00.4"W
3: Ownership	Minera San Julián, S. A. de C. V. Unidad San Julián. Fresnillo plc.
4: Status	Active
5: Date of initial operation	August 2016
6: Is the Dam currently operated or closed as per currently approved design?	Yes
7: Raising method	Downstream
8: Current Maximum Height	140m
9: Current Tailings Storage Impoundment Volume	3,250,000 m ³ *As of March 2019
10: Planned Tailings Storage Impoundment Volume in 5 years time	10,250,000 m ³ *As planned for January 2024
11: Most recent Independent Expert Review	ICOPRESS - October 2018.
12: Do you have full and complete relevant engineering records including design, construction, operation, maintenance, and/or closure?	Yes
13: What is your hazard categorisation of this facility, based on the consequence of failure?	Catastrophic
14: What guideline do you follow for the classification system?	Hawcroft categorisation of risks.
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).	No
16: Do you have internal/in house engineering specialist oversight of this	Both

facility? Or do you have external engineering support for this purpose?

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?

18: Is there a) a closure plan in place for this dam, and b) does it include long term monitoring?

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?

20: Any other relevant information and supporting documentation.

Herradura

1: "Tailings Facility" Name/Identifier	Herradura TSF. One downstream tailings deposit
2: Location	31° 07'42.60" N 112° 52' 6.64" W
3: Ownership	Minera Penmont, S. A. de C. V. Unidad La Herradura. Fresnillo plc.
4: Status	Active
5: Date of initial operation	March 2014
6: Is the Dam currently operated or closed as per currently approved design?	Yes
7: Raising method	Downstream
8: Current Maximum Height	50m
9: Current Tailings Storage Impoundment Volume	26,563,650 m ³ *As of March 2019
10: Planned Tailings Storage Impoundment Volume in 5 years time	31,200,000 m ³ *As planned for January 2024
11: Most recent Independent Expert Review	PH Consulters - June 2018.
12: Do you have full and complete relevant engineering records including design, construction, operation, maintenance, and/or closure?	Yes
13: What is your hazard categorisation of this facility, based on the consequence of failure?	Low. It is categorised in accordance with the geomorphological and seismic conditions.
14: What guideline do you follow for the classification system?	Low. Failure analysis and effect analysis (FEMA).
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).	No

16: Do you have internal/in house engineering specialist oversight of this facility? Or do you have external engineering support for this purpose?	Both
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?	Yes. June 2018.
18: Is there a) a closure plan in place for this dam, and b) does it include long term monitoring?	Yes Yes
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
20: Any other relevant information and supporting documentation.	Nothing

Las Torres

1: "Tailings Facility" Name/Identifier	Las Torres TSF Three upstream tailing deposits, split into six cells: 1. Coronelas I. 2. Coronelas II. 3. Cedros I. 4. Cedros II. 5. Cedros III. 6. Cedros IV
2: Location	1. 20° 59' 4.15" N 101° 13' 3.76" W 2. 20° 59' 9.99" N 101° 13' 19.63" W 3. 20° 59' 30.34" N 101° 12' 46.94" W 4. 21° 00' 8.62" N 101° 12' 57.34" W 5. 21° 00' 24.56" N 101° 12' 52.24" W 6. 21° 00' 39.39" N 101° 12' 45.02" W
3: Ownership	Minera Las Torres. Proyecto Las Torres.
4: Status	Inactive
5: Date of initial operation	Not available*
6: Is the Dam currently operated or closed as per currently approved design?	Inactive
7: Raising method	Upstream
8: Current Maximum Height	1. Coronelas I. 26.62 m 2. Coronelas II. 30.35 m 3. Cedros I. 30.50 m 4. Cedros II. 41.05 m 5. Cedros III. 57.00 m 6. Cedros IV. 51.20 m
9: Current Tailings Storage Impoundment Volume	Not available*
10: Planned Tailings Storage Impoundment Volume in 5 years time	Possibility of operating them again in the medium term
11: Most recent Independent Expert Review	ICOPRES - October 2014.
12: Do you have full and complete relevant engineering records including design, construction, operation, maintenance, and/or closure?	Not available*

13: What is your hazard categorisation of this facility, based on the consequence of failure?	High. There is a town that could be affected in case of an incident.
14: What guideline do you follow for the classification system?	Low. Failure analysis and effect analysis (FEMA).
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).	No failures of the dyke. Decades ago there was a minor issue with the decantation tower.
16: Do you have internal/in house engineering specialist oversight of this facility? Or do you have external engineering support for this purpose?	Both
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?	Scheduled for 2019
18: Is there a) a closure plan in place for this dam, and b) does it include long term monitoring?	Yes Yes
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
20: Any other relevant information and supporting documentation.	Nothing

Tocayos

1: "Tailings Facility" Name/Identifier	Minera Mexicana de Sombrerete, unidad Tocayos TSF One upstream deposit
2: Location	1. 23° 37' 58.72" N 103° 37' 17:64" W
3: Ownership	Minera Mexicana de Sombrerete. Proyecto Tocayos.
4: Status	Inactive
5: Date of initial operation	Not available*
6: Is the Dam currently operated or closed as per currently approved design?	Inactive
7: Raising method	Upstream
8: Current Maximum Height	46.15m
9: Current Tailings Storage Impoundment Volume	Not available*
10: Planned Tailings Storage Impoundment Volume in 5 years time	There are no plans to operate this dam in the future
11: Most recent Independent Expert Review	ICOPRES – February 2015.
12: Do you have full and complete relevant engineering records including design, construction, operation, maintenance, and/or closure?	Not available*
13: What is your hazard categorisation of this facility, based on the consequence of failure?	Low. It is categorised in accordance with the geomorphological and seismic conditions.
14: What guideline do you follow for the classification system?	Low. Failure analysis and effect analysis (FEMA).
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).	No
16: Do you have internal/in house engineering specialist oversight of this facility? Or do you have external engineering support for this purpose?	Both
17: Has a formal analysis of the downstream impact on communities, ecosystems and critical infrastructure in the	Scheduled for 2019

event of catastrophic failure been undertaken and to reflect final conditions?
If so, when did this assessment take place?

18: Is there a) a closure plan in place for this dam, and b) does it include long term monitoring?	Yes Yes
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
20: Any other relevant information and supporting documentation.	The embankments were rehabilitated in 2015 to increase safety. Gutters and downspouts were installed and perimeter gutters rehabilitated to prevent rainwater from entering the dam.

* Due to the age of the dam and the time that has elapsed since decommissioning, some data is not available.

The information presented in this report is true to the best of the Fresnillo's knowledge and understanding as at the date of this report and based on the governance, technical and internal review systems.

Octavio Alvidrez, CEO