



**Saracen**

**TSF Disclosure Statement  
1 August 2019**

Saracen Mineral Holdings Limited (Saracen) received a disclosure request dated 10 April 2019 relating to the management of all tailings storage facilities (TSF) at sites where Saracen, and its subsidiaries, has an economic interest.

The disclosure request was submitted by a group of investors led by the Church of England Pensions Board (CoE) and the Council on Ethics – Swedish National Pension Funds. A copy of this request is included as Appendix A. Saracen supports the need for this disclosure.

In response to the disclosure request, the table below provides a summary of the operation, ownership, facility name and TSF status. All four TSFs are located in Western Australia.

\*Saracen's produces an annual Sustainability Report which provides further information on the management of our tailings storage facilities, available at <https://www.saracen.com.au/about-us/corporate-governance/>

Question	Notes	Answers			
1. "Tailings Facility" Name/identifier	Please identify every <b>tailings storage facility</b> and identify if there are multiple dams (saddle or secondary dams) within that facility. Please provide details of these within question 20.	Carosue Dam Operations - Cells 1, 2 & 3	Thunderbox – Cells A, B	Bannockburn - Cells 1, 2 & 3	Carosue Dam - Luvironza In-Pit
2. Location	Please provide Long/Lat coordinates	30° 8'17.05"S 122°20'35.68"E	28°11'23.95"S 121° 1'7.78"E	28°26'54.83"S 120°54'15.77"E	30° 6'25.39"S 122°20'41.48"E
3. Ownership	Please specify: Owned and Operated, Subsidiary, JV, NOJV, as of March 2019	Owned & Operated	Owned & Operated	Owned (Historical)	Owned (Historical)
4. Status	<p>Please specify: Active, Inactive/Care and Maintenance, Closed etc.</p> <p>We take closed to mean: a closure plan was developed and approved by the relevant local government agency, and key stakeholders were involved in its development; a closed facility means the noted approved closure plan was fully implemented or the closure plan is in the process of being implemented. A facility that is inactive or under C&amp;M is not considered closed until such time a closure plan has been implemented.</p>	Active	Active	Historical Closed	Historical C&M
5. Date of initial operation	(date)	Cell 1: 2000 Cell 2: 2001 Cell 3: 2015	Cell A: 2002 Cell B: 2002	Cell 1: 1993 Cell 2: 1996 Cell 3: 1997	2012-2013
6. Is the Dam currently operated or closed as per currently approved design?	Yes/No. If 'No', more information can be provided in the answer to Q20	Yes	Yes	Yes - Closed	Yes - Closed
7. Raising method	Note: Upstream, Centerline, Modified Centreline, Downstream, Landform, Other.	Upstream & Downstream	Upstream & Downstream	N/A	N/A
8. Current Maximum Height	Note: Please disclose in metres	Approved to RL 375.5m (Proposed RL387.5 by 2027 subject to approval – 32m)	Approved RL511.5m (concept design to RL519.8m)	10m	N/A Below GL In Pit
9. Current Tailings Storage Impoundment Volume	Note: (m <sup>3</sup> as of March 2019)	Approx 21 x10 <sup>6</sup> m <sup>3</sup>	Approx 14 x10 <sup>6</sup> m <sup>3</sup>	Approx 6.1 x10 <sup>6</sup> m <sup>3</sup>	4.5 x10 <sup>6</sup> m <sup>3</sup> (included in CDO calculation)
10. Planned Tailings Storage Impoundment Volume in 5 years time.	(m <sup>3</sup> as planned for January 2024)	Approx 35 x10 <sup>6</sup> m <sup>3</sup>	Approx 28 x10 <sup>6</sup> m <sup>3</sup>	N/A	4.5 x10 <sup>6</sup> m <sup>3</sup> (included in CDO calculation)

Question	Notes	Answers			
11. <b>Most recent Independent Expert Review</b>	(date) For this question we take 'Independent' to mean a suitably qualified individual or team, external to the Operation, that does not direct the design or construction work for that facility.	Triennial Audit: 2018 Annual Audit: 2018	Triennial Audit: 2018 Annual Audit: 2018	2009	Triennial Audit: 2018 Annual Audit: 2018
12. <b>Do you have full and complete relevant engineering records including design, construction, operation, maintenance, and/or closure?</b>	(Yes or No) We take the word "relevant" here to mean that you have all necessary documents to make an informed and substantiated decision on the safety of the dam, be it an old facility, or an acquisition, or legacy site. More information can be provided in your answer to Q20	Yes	Yes	Partial	Yes
13. <b>What is your hazard categorisation of this facility, based on the consequence of failure?</b>		Significant Category 1, Significant ANCOLD due to proximity of adjacent UG mine.	Significant Category 1, Significant ANCOLD	N/A	Included in CDO Assessment
14. <b>What guideline do you follow for the classification system?</b>		ANCOLD 2012 APEGBC 2016 ICMM 2016 CDA 2016 ICOLD 2011 CDA 2016 DMIRS1998,2013,2015	ANCOLD 2012 APEGBC 2016 ICMM 2016 CDA 2016 ICOLD 2011 CDA 2016 DMIRS1998,2013,2015	DMIRS 1998	ANCOLD 2012 APEGBC 2016 ICMM 2016 CDA 2016 ICOLD 2011 CDA 2016 DMIRS1998,2013,2015
15. <b>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).</b>	(Yes or No) We note that this will depend on factors including local legislation that are not necessarily tied to best practice. As such, and because remedial action may have been taken, a "Yes" answer may not indicate heightened risk.  Stability concerns might include toe seepage, dam movement, overtopping, spillway failure, piping etc. If yes, have appropriately designed and reviewed mitigation actions been implemented?  We also note that this question does not bear upon the appropriateness of the criteria, but rather the stewardship levels of the facility or the dam. Additional comments/information may be	No	No	No	No

Question	Notes	Answers			
	supplied in your answer to Q20.				
16. Do you have internal/in house engineering specialist oversight of this facility? Or do you have external engineering support for this purpose?	Note: Answers may be "Both".	External	External	N/A	N/A
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?	Note: Please answer 'yes' or 'no', and if 'yes', provide a date.	Yes. Reviewed annually as part of the independent inspections and Hazard Rating reporting (2018).	Yes. Reviewed annually as part of the independent inspections and Hazard Rating reporting (2018).	N/A	N/A
18. Is there a) a closure plan in place for this dam, and b) does it include long term monitoring?	Please answer both parts of this question (e.g. Yes and Yes)	a) Yes b) Yes	a) Yes b) Yes	N/A	N/A
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 or No)	Yes	Yes	Yes	No
20. 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.	Note: this may include links to annual report disclosures, further information in the public domain, guidelines or reports etc.	<a href="#">2018 Sustainability Report</a>	<a href="#">2018 Sustainability Report</a>		

## Appendix A

10<sup>th</sup> April 2019

Mr Raleigh Finlayson  
Chief Executive  
Saracen Mineral Holdings Ltd  
Level 11 40 The Esplanade  
Perth 6000  
Australia

Dear Mr Finlayson,

**Re: Urgent request for information concerning tailings dam management**

We write as 96 investors in the mining sector, who together represent over \$10.3 trillion in assets under management. This urgent engagement is being led by the Church of England Pensions Board and Swedish Council on Ethics for the AP Funds and backed by the UN-supported Principles for Responsible Investment (PRI).

The tragic loss of life from the Brumadinho and Samarco catastrophic tailings dam failures highlighted the devastating consequences when something goes wrong.

As responsible investors, we are committed to working with the mining sector to ensure that verifiable best practice standards are developed, implemented and maintained. To enable proper engagement on tailings dam management we need to assess the risks and the current state of tailings dam facilities that individual mining companies are associated with and/or have responsibility for, whether under construction, operation or retired/decommissioned.

**Disclosure Request:**

As institutional investors in the mining industry and in the absence of common public reporting standards on tailings storage facilities we respectfully request that you provide specific disclosures of all the tailings facilities of your company, as set out below. We ask that you provide this information, in accordance with the disclosure request included below (Annex 2), in table format. This disclosure should also include:

- All tailings facilities where the company has any interest, through subsidiaries, partnerships, joint ventures both incorporated and unincorporated and any other enterprises of whatever legal form.
- All joint venture partners reporting on jointly owned facilities, even if you are not the operating partner ("NOJV's"), should use the same facility name/identifier in the disclosure statement.

**Given the urgency and magnitude of this issue, we request that the public disclosure of this information, certified by either the Chairperson of the Board of Directors and/or the Chief Executive Officer\*, be placed on your company website within 45 days of the date of this letter. We are in the process of**

**developing a public investor register of those companies that make the disclosures requested.**

Once your disclosure is complete please can you confirm this by emailing [emily.richards@churchofengland.org](mailto:emily.richards@churchofengland.org), providing the details of a contact person for future correspondence.

**This disclosure is urgent and essential for investors to be able to understand how your company manages tailings facilities and any associated risks. If you are unable to answer a question, or do not have the requested information, please explain why this is the case and what action the company is taking to address this.**

We strongly recommend that your disclosure is accompanied by plans to communicate directly with communities that may be affected by your tailings footprint.

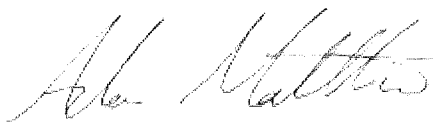
This request follows a public call by a group of investors with \$6 trillion in AUM for an independent tailings classification and monitoring system pursuant to a high-level investor roundtable on mining and tailings safety held in London on 4<sup>th</sup> March 2019. The roundtable considered a series of presentations from some of the world's leading tailings experts that left investors deeply concerned.

We acknowledge and are fully aware that good practice in tailings management exists, but it is of critical importance that this can be transparently verified for all mining companies.

We look forward to receiving your response and to working with the industry to support best practice in governance and tailings management. If you have any questions, please contact Emily Richards at: [emily.richards@churchofengland.org](mailto:emily.richards@churchofengland.org). We have also set up a webpage at: <https://www.churchofengland.org/investor-mining-tailings-safety-initiative> that will serve as repository for further information on the initiative and this disclosure request.

The list of investors supporting this request are detailed below (Annex I).

Yours sincerely,



**Adam C.T. Matthews**  
Co-Lead  
Investor Mining & Tailings Safety Initiative  
Director of Ethics & Engagement  
Church of England Pensions Board



**John Howchin**  
Co-Lead  
Investor Mining & Tailings Safety Initiative  
Secretary General  
Swedish Council on Ethics  
for the AP Public Pension Funds

\* attesting that the information presented is true to the best of your knowledge, based on your governance, technical and review systems.



## **Annex I: Investor Signatories**

Aberdeen Standard Investments  
Achmea Investment Management  
Adrian Dominican Sisters, Portfolio Advisory Board  
Aegon Asset Management  
Airways Pension Scheme and New Airways Pension Scheme  
Allianz Global Investors GmbH  
Alphinity Investment Management  
Andra AP-fonden (AP2)  
APG Asset Management  
AustralianSuper  
Aviva Investors  
Baillie Gifford  
BlueBay Asset Management LLP  
BMO Global Asset Management  
BNP Paribas  
Border to Coast Pensions Partnership  
British Airways Pension Investment Management Limited  
British Columbia Investment Management Corporation (BCI)  
Brunel Pension Partnership  
CalSTRS  
CCLA  
Central Finance Board of the Methodist Church  
Church Commissioners for England  
Church of England Pensions Board  
Conference for Corporate Responsibility Indiana and Michigan  
Congregation of St Joseph  
CoreCommodity Management, LLC  
Daughters of Charity, Province of St Louise  
DNB Asset Management  
Domini Impact Investments  
EdenTree Investment Management  
EFG Asset Management  
Environment Agency Pension Fund  
ESG Portfolio Management GmbH  
Ethos Foundation Switzerland  
Epworth Investment Management  
FIM/S-Bank Wealth Management  
Fjärde AP-fonden (AP4)  
Första AP-fonden (AP1)  
Friends Fiduciary Corporation  
GAM  
Gemway Assets  
Government Superannuation Fund Authority  
Greater Manchester Pension Fund  
GW&K Investment Management  
Hermes  
Invesco Asset Management  
Investec Asset Management

## **Annex 1: Investor Signatories**

Janus Henderson  
Jesuit Committee on Investment Responsibility  
Karner Blue Capital, LLC  
KBI Global Investors  
Länsförsäkringar AB  
LAPFF  
LGIM  
Local Pensions Partnership  
Lothian Pension Fund  
M & G  
Mercy Investment Services  
Merseyside Pension Fund  
MFS Investment Management  
Moneda Asset Management  
MP Pension  
National Employment Savings Trust (NEST)  
Newton Investment Management  
New Zealand Superannuation Fund  
Northern LGPS  
Öhman Fonder  
OIP Trust  
Pax World Funds  
Pensions Caixa 30  
PGGM  
Rathbone Brothers Plc  
Richmond Global Compass  
Robeco  
Royal London Asset Management (RLAM)  
RRSE (Le Regroupement pour la responsabilité sociale des entreprises)  
Ruffer LLP  
Sarasin & Partners  
Schroders  
SHARE (Shareholder Association for Research & Education)  
Sisters of St. Francis of Philadelphia  
Sjunde AP-fonden (AP7)  
Skandia  
Solaris Investment Management  
Storebrand Asset Management  
Strathclyde Pension Fund  
Sustainable Value Investors  
SYZ Asset Management  
Tredje AP-Fonden (AP3)  
Trillium Asset Management  
Tyne and Wear Pension Fund  
Universities Superannuation Scheme (USS)  
Vancity Investment Management Ltd.  
Water Asset Management LLC  
Zevin Asset Management

## Annex 2: Disclosure requirements

Overview question:

Please:

- a) Provide an overview of your tailings management system, and how you manage risk
- b) Confirm whether your approach to tailings management has changed or will change in light of the recent tailings disasters at Brumadinho, Mariana, Mt Polley and others. Have you, for example, reviewed all tailings storage facilities with upstream dam construction, and taken steps necessary to protect local communities and the environment e.g. buttressing, evacuation?

Question	Notes
1. "Tailings Facility" Name/identifier	Please identify every <b>tailings storage facility</b> and identify if there are multiple dams (saddle or secondary dams) within that facility. Please provide details of these within question 20.
2. Location	Please provide Long/Lat coordinates
3. Ownership	Please specify: Owned and Operated, Subsidiary, JV, NOJV, as of March 2019
4. Status	<p>Please specify: Active, Inactive/Care and Maintenance, Closed etc.</p> <p>We take closed to mean: a closure plan was developed and approved by the relevant local government agency, and key stakeholders were involved in its development; a closed facility means the noted approved closure plan was fully implemented or the closure plan is in the process of being implemented. A facility that is inactive or under C&amp;M is not considered closed until such time a closure plan has been implemented.</p>
5. Date of initial operation	(date)
6. Is the Dam currently operated or closed as per currently approved design?	Yes/No. If 'No', more information can be provided in the answer to Q20
7. Raising method	Note: Upstream, Centerline, Modified Centreline, Downstream, Landform, Other.
8. Current Maximum Height	Note: Please disclose in metres
9. Current Tailings Storage Impoundment Volume	Note: (m <sup>3</sup> as of March 2019)
10. Planned Tailings Storage Impoundment Volume in 5 years time.	(m <sup>3</sup> as planned for January 2024)
11. Most recent Independent Expert Review	(date) For this question we take 'Independent' to mean a suitably qualified individual or team, external to the Operation, that does not direct the design or construction work for that facility.

Question	Notes
<p><b>12. Do you have full and complete relevant engineering records including design, construction, operation, maintenance, and/or closure?</b></p>	<p>(Yes or No) We take the word “relevant” here to mean that you have all necessary documents to make an informed and substantiated decision on the safety of the dam, be it an old facility, or an acquisition, or legacy site. More information can be provided in your answer to Q20</p>
<p><b>13. What is your hazard categorisation of this facility, based on the consequence of failure?</b></p>	
<p><b>14. What guideline do you follow for the classification system?</b></p>	
<p><b>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).</b></p>	<p>(Yes or No) We note that this will depend on factors including local legislation that are not necessarily tied to best practice. As such, and because remedial action may have been taken, a “Yes” answer may not indicate heightened risk.</p> <p>Stability concerns might include toe seepage, dam movement, overtopping, spillway failure, piping etc. If yes, have appropriately designed and reviewed mitigation actions been implemented?</p> <p>We also note that this question does not bear upon the appropriateness of the criteria, but rather the stewardship levels of the facility or the dam. Additional comments/information may be supplied in your answer to Q20.</p>
<p><b>16. Do you have internal/in house engineering specialist oversight of this facility? Or do you have external engineering support for this purpose?</b></p>	<p>Note: Answers may be "Both".</p>
<p><b>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?</b></p>	<p>Note: Please answer 'yes' or 'no', and if 'yes', provide a date.</p>
<p><b>18. Is there a) a closure plan in place for this dam, and b) does it include long term monitoring?</b></p>	<p>Please answer both parts of this question (e.g. Yes and Yes)</p>

Question	Notes
<p><b>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?</b></p>	<p>(Yes or No)</p>
<p><b>20. Any other relevant information and supporting documentation.</b></p> <p><b>Please state if you have omitted any other exposure to tailings facilities through any joint ventures you may have.</b></p>	<p>Note: this may include links to annual report disclosures, further information in the public domain, guidelines or reports etc.</p>

**NOTES:**

- Please note that a website is currently under construction (<https://www.churchofengland.org/investor-mining-tailings-safety-initiative>) that will provide additional guidance e.g. frequently asked questions to aid the completion of this disclosure.