

Subscribe now

(https://premium.telegraph.co.uk/?ICID=generic_premiumsub_generic_generic_topnav&redirectTo=https%3A%2F%2Fwww.telegraph.co.uk%2Fbusiness%2F2019%2F02%2F10%2Fmust-work-together-prevent-new-dam-disaster%2F)

My Account (https://secure.telegraph.co)

The Telegraph

(https://www.telegraph.co.uk/)

ALL SECTIONS

Business

More ▾

FTSE 100 ▼
7179.17 -0.56%

(HTTPS://MARKETS.TELEGRAPH.CO.UK/#1/INDEX/X1)

FTSE 250 ▼
19068.89 -0.31%

(HTTPS://MARKETS.TELEGRAPH.CO.UK/#1/INDEX/X12)

GBP/USD ▲
\$1.3071 +1.14%

(HTTPS://MARKETS.TELEGRAPH.CO.UK/#1/CURRENCY/Y15)

GBP/EUR ▲
€1.1526 +0.85%

(HTTPS://MARKETS.TELEGRAPH.CO.UK/#1/CURRENCY/Y9)

BRENT OIL ▼
\$66.34 -0.20%

(HTTPS://MARKETS.TELEGRAPH.CO.UK/#1/COMMODITY/C7)

BITCOIN ▲
\$3951.84 +1.52%

(HTTPS://MARKETS.TELEGRAPH.CO.UK/#1/CURRENCY/Y31)

More share information on MARKETS HUB (https://markets.telegraph.co.uk/)

PREMIUM

Home > Business

We must work together to prevent a new dam disaster

Follow

ADAM MATTHEWS

10 FEBRUARY 2019 • 6:18PM



The Vale dam collapse was the latest in a series of mining disasters

The collapse of a dam owned by giant mining firm Vale in Brumadinho, Brazil, has led to a devastating loss of lives and livelihoods, while causing what may turn out to be extensive environmental damage.

Something very different now needs to happen in response to this disaster that ensures workers and communities are not exposed to such risks. That is why last week the Church of England along with investors in the mining sector made a clear and urgent call for a public system that holds mining companies to higher standards for tailings dam safety.

While some companies have in the last few days indicated support for an industry wide approach to improving tailings it is telling, and deeply unfortunate, that in the wake of the Brumadinho disaster, headlines from some mining industry press days after the disaster considered how it might “harm risk appetite” in the mining industry globally. There may well be changes to risk appetite – from investors, regulators, insurers, boards and management – but the most pertinent question is not whether the risk appetite is rising or falling. It is whether this appetite is well calibrated to the actual risks run by those operating tailings dams, and by those living and working in the shadow of dams.

Tailings dams are designed permanently to hold mine waste, which may be liquid, solid, or slurry, toxic or non-toxic. They are among the largest engineered structures on earth, with an estimated 3,500 active tailings impoundments worldwide.

Unfortunately, it appears that Brumadinho is only the most recent of an emerging trend of serious failures: Mount Polley (Canada) in 2014 and Samarco (Brazil) in 2015 were two of the most well known examples in the last five years. At Samarco 19 lives were lost whilst at Mount Polley extensive environmental damage was caused. The UN Environment Programme has cited research showing that the number of serious failures has increased over the last three decades (though the overall number of failures has decreased). “Serious” in this context means a failure that causes the loss of life, and/or the release of more than 100,000 cubic metres of semi-solid tailings discharge.

Global statistics on the failure of tailings dams are relatively hard to come by, since there is no publicly accessible inventory of tailings dams. Failures take place in jurisdictions with wide differences in regulatory practice, and in companies with different operations, engineering standards and reporting requirements. We suggest that in order to promote the wide use of best available technology and policies, just such a global and publicly accessible (and understandable) resource ought to be scoped and created.



More than 150 people were killed in the accident, outside Brumadinho in Brazil

There are also, as you might expect, very many different kinds of dams, with different engineering and risk profiles, which makes the prospect of standardised and comparable assessment difficult. This is perhaps why the Golder Associates report on “Tailings Dam Management”, which was commissioned by ICMM after the Samarco dam failure, focuses on the need for a global classification system that assesses the consequences of failure, rather than the likelihood of failure. It is important to know whether a dam is very remote or perched above a village, whether the environmental impact of failure would be contained, or whether it would poison an entire catchment area. With that information in hand, we would have more confidence that those involved in the management, oversight and regulation of tailings facilities are able to put safety first.

It is understandable that the scale of the tragedy in Brazil has seen protests against the mining industry as a whole. Yet society demands the resources from mining, and indeed many mined minerals – such as lithium and cobalt – are essential to both the low carbon transition and modern living. There is good practice in industry, and a wealth of engineering knowledge and experience, but as a sector it is not clear that lessons from the past have been learnt. UNEP’s 2017 report on tailings dam facilities calls for action to “Facilitate international cooperation on mining regulation and the safe storage of mine tailings through a knowledge hub”. Also to “Create and fund an accessible public-interest, global database of mine sites, tailings storage facilities and research”, along with a call for increased independent monitoring, and greater transparency.

This is why the Church of England Pensions Board, Church Commissioners for England, and a coalition of investors representing over \$1 trillion of assets are jointly calling for a global independent classification system to monitor and make public the safety risk of mining tailing dams.

We propose that the new system should require annual audits of all tailings dams, as well as verification that corresponding safety standards are being implemented, and that all reporting should be accessible to communities, governments, civil society, and investors via a public database. Only this will drive a new level of accountability within the sector.

This proposal now requires the urgent attention of all stakeholders. The scale of the catastrophe in Brazil is an urgent call to action and we must all work together to drive a new level of accountability and transparency within the mining sector.

Adam Matthews is director of ethics and engagement at the Church of England Pensions Board

Contact us

[About us \(https://corporate.telegraph.co.uk/\)](https://corporate.telegraph.co.uk/)

Rewards

[Archive \(https://www.telegraph.co.uk/archive/\)](https://www.telegraph.co.uk/archive/)

[Reader Prints \(http://telegraph.newsprints.co.uk/\)](http://telegraph.newsprints.co.uk/)

Branded Content

Syndication

Guidelines

Privacy

Terms and Conditions

[Advertising terms \(http://spark.telegraph.co.uk/toolkit/advertising/terms-and-conditions/\)](http://spark.telegraph.co.uk/toolkit/advertising/terms-and-conditions/)

[Fantasy Sport \(https://fantasyfootball.telegraph.co.uk/\)](https://fantasyfootball.telegraph.co.uk/)

[Voucher Codes \(https://www.telegraph.co.uk/vouchercodes\)](https://www.telegraph.co.uk/vouchercodes)

Modern Slavery

© Telegraph Media Group Limited 2019