

# The true cost of mining

## Ensuring justice for people and communities affected by the Brumadinho dam disaster

### Introduction

The second anniversary of mining company Vale's rights abuses in Brumadinho is 25 January 2021. Christian Aid and MAB (Movimento dos Atingidos por Barragens or Movement of People Affected by Dams) together commemorate the 270 victims<sup>1</sup> who died and stand in solidarity with their families and communities.

A tailings dam<sup>2</sup> in Vale's<sup>3</sup> iron ore mine collapsed in Brazil's state of Minas Gerais, near the city of Brumadinho, on 25 January 2019. This released 11.7 million cubic metres of toxic waste and mud,<sup>4</sup> contaminating the Paraopeba River and nearby water systems and lands, affecting the livelihoods of an estimated 944,000 people.<sup>5</sup> These people are still trying to get their lives back on track.

The UN Special Rapporteur on the implications for human rights of the environmentally sound management and disposal of hazardous substances and wastes said 'the Brumadinho disaster was technically caused by structural instability and liquefaction, the real cause lies with a remarkable lack of Government oversight and criminally reckless conduct by Vale.'<sup>6</sup> Court rulings, individual lawsuits and a remedy agreement for families who lost loved ones have been achieved. Yet the process of comprehensive redress to all affected communities, including for lost livelihoods and ecosystems in the region, is ongoing.

The disaster must remain on the agendas of decision makers and those responsible. The response so far has been inadequate and has

### What needs to change

- **Families of the people killed by the Brumadinho dam disaster need to be fully compensated by Vale** and responsible state actors.
- **Compensation to people who have lost their livelihoods through contamination of waterways, lands and water** should be provided using a fair, consultative and transparent process.
- **People and communities displaced by further unsafe dams need adequate compensation, and support for their livelihoods**
- **Mining companies with tailings dams in every country need to be subject to mandatory disclosure of risks.** Initiatives such as the Investor Mining and Tailings Safety Initiative are important initial steps but should be made mandatory.
- **A gender impact assessment of the human rights abuses and reparations should be conducted,** according to nationally approved legislation and following guidance issued by the UN Working Group on Business and Human Rights.
- **Extraterritorial responsibility of multinational companies headquartered abroad should be ensured** through duty of vigilance and mandatory human rights due diligence laws.
- **A UN Binding Treaty on Business and Human Rights** should be agreed, providing robust access to remedy for human rights violations by multinational companies, including for individual victims, communities and to address gendered impacts.
- **Robust implementation of human rights and environmental protection legislation should be ensured, with community participation.** Modern mining generates huge volumes of waste; effective tailings management is crucial to reduce waste and protect communities and the environment. This requires mandatory legislation.

also brought to light a broader and urgent concern. According to the Brazilian National Mining Agency (ANM), there were 47 dams at risk in Brazil as of 31 March 2020,<sup>7</sup> of which 37 were in the state of Minas Gerais and 26 owned by Vale according to MAB. Of the Vale-owned dams at risk, 18 were in Minas Gerais. Communities living near these dams now face displacement and temporary housing, leading to further loss of income and livelihoods.<sup>8</sup> While the responsibility for ongoing inspection lies with the federal government through the National Mining Agency, after the disaster, multiple responsibilities due to loss of life, of people's livelihoods and of housing fall under the competence of different state actors.

Tailings storage facilities disasters rarely occur because of an isolated technical cause but are normally attributed to failures such as the disregard of good engineering practices, management or poor governance frameworks.<sup>9</sup> The Brumadinho disaster reflects the attitudes in a sector where tailings storage facilities management is seen as peripheral and given low priority; this is symptomatic of a broken economic model that puts people and the planet at risk in the pursuit of profit.<sup>10</sup> It is an injustice, not just for individuals and families directly affected, but also for whole communities and future generations. This is because contamination of productive resources such as soils and water courses puts rights to adequate food and nutrition as well as to food sovereignty<sup>11</sup> at risk. It also violates the principles of sustainable development, including that meeting today's needs should not reduce the ability of future generations to meet theirs.

### People mobilising for justice

On the eve of the first anniversary of the Brumadinho dam disaster, at an event organised by MAB<sup>12</sup> in Betim, Minas Gerais, human rights defender and theologian Leonardo Boff warned:

*The main crisis of humanity is inequality: the lack of sympathy with other people's suffering... Either we take care of our common home, without relying on easy fixes, or we will witness the death of*

*millions of people. Our lives should be a great adventure on this planet, not suffering and sacrifice.'*

This was part of the 'March of People's Affected', which ended in Brumadinho on 25 January. The march travelled 300 kilometres across the state to denounce the conduct of Vale following the collapse of the Mariana (2015) and Brumadinho (2019) dams.

Boff highlighted how social movements in Brazil are resisting, bringing together marginalised people including women, peasant farmers, Afro-Brazilians and other affected peoples to discuss today's unsustainable development model. This model is underpinned by social inequalities<sup>13</sup> and environmental injustice.

Covid-19 restrictions mean that no similar commemorative events can take place to mark this second anniversary of the disaster on 25 January 2021. However, virtual events have been taking place since 8 December, continuing to 30 January, with the main event to commemorate victims being held on 25 January.<sup>14</sup> A series of community-led initiatives are happening online to highlight the plight of the affected communities and their demands, and make sure that similar disasters never happen again.

### Investor and industry response

Following the Brumadinho disaster, a coalition of investors launched the Investor Mining and Tailings Safety Initiative – an investor-led engagement governed through a Steering Committee chaired by the Church of England Pensions Board and the Swedish National Pensions Funds Council on Ethics. This has convened institutional investors (representing more than \$14 trillion assets under management) active in extractive industries including major asset owners and asset managers.

The industry responded with a Global Tailings Review<sup>15</sup> co-convened by the International Council on Mining and Metals (ICMM), the UN Principles for Responsible Investment network

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and the UN Environment Programme. The review focused on the development and promotion of a new voluntary safety standard on tailing dam safety.

In August 2019, the ICMM launched its new Global Industry Standard on Tailings Management. Its accompanying report<sup>16</sup> is designed to improve operational control of the existing mine tailings management process and so reduce the consequences of another catastrophic failure.<sup>17</sup> The Principles for Responsible Investment network worked with the ICMM on the Standard and is developing a set of 'investor expectations'<sup>18</sup> to support mining companies in implementing it.

The UN Environment Programme has said it will support governments wishing to build on and incorporate the Standard into national or state legislation and policies. This is an opportunity for the Government of Brazil to review and strengthen inadequate legislation.

National Policy for Dam Safety, law number 12334/2010,<sup>19</sup> passed in Brazil in September 2020 to tighten dam safety regulation along with the National Policy on the Rights of People Affected by Dams (PNAB) (which is pending approval in the Brazilian Congress), which could advance human rights standards for people affected by dams. These may be positive steps, as they prohibit new tailings facilities close to communities and demand the decommissioning of upstream dams of the type which caused the Brumadinho disaster.<sup>20</sup> However, they will fail to uphold people's rights if, as MAB reports, companies seek to avoid applying the new rules and instead of decommissioning dams that pose a risk to nearby communities, force those communities to move away from the dams. Letícia Oliveira, representing MAB, says that:

*"Disclosure initiatives are important, but we are arguing for clearer policies on the rights of people to their land and homes. MAB are pressing for a new law in this regard in Brazil at both federal and state levels. Almost two years after the Brumadinho dam broke, we have now*

*achieved in Minas Gerais the approval of a state policy to uphold rights of people affected by the disaster. It is a victory, but this law does not have all the points the affected want and need. We will continue the struggle.*

MAB reports<sup>21</sup> that where Vale is engaging on matters relating to access to remedy and reparations, it generally tries to limit these claims to people who have lost their lives and provides only very limited support to those who have lost homes or livelihoods. MAB argues that self-regulation is not adequate, and oversight is vitally needed from governments, international investors, civil society and international bodies such as UN regional economic commissions and the UN Human Rights Council.

The Investor Mining and Tailings Safety Initiative is considering, for example, the establishment of an independent institute with oversight of the ICMM Standard (and which is free from industry interference) as the essential next step. This must include the interests of affected communities and environmental watchdog groups to make it inclusive of all interests. Tchenna Maso, representing MAB, says that:

*"One of the great problems we have today, in Brumadinho's case, is that the communities are not allowed to state by themselves their interests, even if they are organised in collectives for that purpose. The state says what the interests of the community are without any kind of consultation. I think it is fundamental to emphasise that the interests of the communities are the ones they present by themselves, respecting the right to prior, free and informed consultation as a human right, and thus guarantee a greater effectiveness to any reparatory process."*

The investor and industry responses thus far are not in themselves enough, however. A group of more than 500 NGOs signed up to Safety First

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guidelines coordinated by Earthworks.<sup>22</sup> Signatories argued that the new Global Industry Standards for Tailings Management would not prevent the failure at Brumadinho happening again or any other mine tailings containment failures happening.

### Increasing disclosure of tailings facilities

In addition to pressing the industry into developing a new Standard, the Investor Mining and Tailings Safety Initiative also requested detailed disclosure on tailings storage facilities. Although not mandatory, the initiative is a positive move. It coordinated an investor approach to mining companies via a joint letter requesting details of the safety of tailing dams in all countries. It has sought inputs from some of the community representatives (however not MAB) impacted by the recent disaster – environmental experts, government representatives, international technical advisers – as well as company representatives.

The group of investors in 2019 wrote to 726 extractive companies responsible for an estimated 18,000 tailings storage facilities worldwide, of which around 3,500 are active. The request sought to establish greater disclosure on the management of tailings storage facilities as of 30 April 2020, with these results:<sup>23</sup>

- **340 companies** responded (47% of those contacted); **386 did not respond** (53%).
- **187** confirmed they **did not** have tailings facilities (26%); **153** confirmed they **did** have tailings facilities (21%).
- **42** responding companies (6%) have not yet published their disclosure on a website or have asked for **extra time** to complete their disclosure.

This disclosure shows that there are significant risks associated with tailing storage facilities in the countries selected for this sample. Meanwhile mining companies who disclosed data in the survey also refer to separate safety standards in cases where a national standard is yet to be developed, such as Brazil.

While disclosure alone does not prevent a disaster, it can indeed lead to political processes at national, regional and intergovernmental level to accomplish this. It is therefore important to consider the role that tailing dam safety disclosure plays in the overall picture.

### The need for international legislation and commitments for effective regulation

We also note that international legislation is lacking. The UN Economic Commission for Latin America and the Caribbean has recently advanced guidelines for including human rights impact assessment as part of environmental impact assessment.<sup>24</sup> But there is no binding international agreement or commitment on tailing dam safety, or on protection of human rights in the mining sector more generally.

A wide commitment on human rights due diligence and access to remedy would encompass actions governments can take to ensure mining sector practices are coherent with the UN Guiding Principles on Business and Human Rights (including access to remedy) and broader human rights commitments, as well as actions to enhance transparency and accountability. They also include a commitment to transparency and social accountability in implementation, and approaches such as gender responsive due diligence,<sup>25</sup> which we have analysed to be lacking in most impact assessments of mining sector activities.<sup>26</sup> This has led to calls for a binding international legal instrument, in the shape of the UN Binding Treaty on Business and Human Rights, to be agreed at the UN Human Rights Council. This would ensure such legal commitments, including from a gender responsive due diligence and access to remedy perspective, are provided in all cases of corporate abuses.

International cooperation to ensure human rights in business practice is still weak because most of the guiding frameworks are voluntary and seek to foster business growth over community rights.

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### Ensuring access to remedies

Huge deficits remain in access to effective remedy for communities impacted by mining activities – as exemplified by the risk of unsafe tailing dams. Since the outbreak of the Covid-19 pandemic, these can be expected to have worsened. This is because works to carry out safety checks or structural reinforcements are delayed while resettlement activities cause more disruption and potential risk of infection for the people from affected areas.

Christian Aid and MAB have highlighted<sup>27</sup> the importance of gender-sensitive human rights due diligence and access to remedy. This is particularly vital for women who may not otherwise have direct access where remedy is provided to ‘heads of households’ who tend to be men. Men own more assets than women do and so are usually the subject of legal claims for lost livelihoods even if women depend on those assets as much as the men do.

### Access to remedy in Brazil so far

Brazil's new National Dams Safety Policy changes the rules of dam control and stipulates up to BRL 1 billion (\$176 million) in fines for companies that fail to comply with safety standards.<sup>28</sup> It also prohibits the construction of reservoirs using the upstream method, as used in Brumadinho, in which the dam grows in steps, using the mining waste itself. This is considered by experts to be a less safe option.<sup>29</sup> The deadline for mining companies to eliminate the dams built using this model is 25 February 2022. This is leading to people affected by dams being displaced as a quicker solution to mitigating loss of life than repairing the dams by this deadline.

MAB and wider Brazilian civil society have been key in the National Dams Safety process, showing that civil society organisations are crucial in bringing transformative change and enhancing safety at mining sites. This includes by giving voice to people and their concerns, and ultimately – where needed – in demanding remedy to corporate and state abuses.

### Next steps

There is a critical need for an alternative rights-based and environmentally compliant operating model. Such a model must achieve the needs and aspirations of the people who live in and near mining sites, as well as wider society who benefit from the revenues of mining, or indeed companies and investors who profit from it

The industry should not be allowed to continue to regulate itself. Mining companies have already been accused of controlling their auditors and silencing dissent among their workers.<sup>30</sup> Establishing and enforcing safety protocol must be done independently and established through multi-stakeholder processes that actively engage workers, communities and civil society.

The UN Binding Treaty on Business and Human Rights would provide a sea change in terms of the operating model, as it states the primacy of human rights obligations of both states and companies before their profits or taxes from mining operations as a non-negotiable value on which an economy is built. Mining and mineral resources ultimately belong to people, not to the mining companies, and people represented by their elected representatives in government need to make such a vision happen at all levels: national, regional and international.

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## Recommendations

### For governments

**Governments should implement more effective mining and dam disaster-related prevention and monitoring**, together with clear provision for emergency action.

- **Mining and dam-related risks should be addressed in the implementation of the Sendai Framework for Disaster Risk Reduction** to prevent and mitigate risk and occurrence of disasters.
- **Monitoring of dams** is vital to gather reliable data so that actors can understand the scope of the problems.

**All governments should ensure adequate human rights due diligence** to support better accountability and transparency:

- **Effective access to remedy for any victims of abuses should be legislated** on the basis of human rights due diligence, incorporating a gender and inequality lens, to ensure all victims are mapped, and environmental legislation, so any abuses lead to reparations.
- **Access to remedy and due diligence need to be international and cross-border, respecting the extraterritorial obligations of companies and states** This means that for companies headquartered in a country other than where the abuse takes place, we would consider the entire corporate group as liable for remedy and human rights due diligence.
- **Dam safety guidelines need to be developed in an open and consultative way to achieve the ambition established by the 'Safety First' guidelines.** All stakeholders, including experts, civil society, academia and companies, must ensure that safety guidelines and risk ratings reflect actual environmental and human rights risks.
- **Those profiting from failing tailing dams should not be allowed to bid for any new mining licences, and existing licences** should be immediately withdrawn as soon as legally feasible.

### For companies

- **Dam safety guidelines need to be operationalised** as quickly as possible when they are legislated. And companies should, in the absence of national guidance, use the best available dam safety guidelines for making risk ratings (rather than the lowest standards).
- **Companies should participate actively in human rights due diligence, enabling participation of all community members, including women and marginalised groups.** They should ensure they conduct due diligence to the highest standards as established by national guidance, with respect to the highest international standards.
- **Companies should not try to influence decisions on environmental or human rights licencing or due diligence.** They should rather allow for independent bodies to be set up with wide governance processes that don't only include the company and the government representative body offering the licence.
- **Companies that have caused harm should fully participate in a process of remedy with everyone affected, rather than try to limit their liability** without understanding the damage caused.

### For investors

- Where **investors** see that a company is not abiding by the highest standards of human rights obligations, they **should engage in dialogue with the company, and be prepared to divest** to ensure that the company complies with international human rights and environmental standards.
- **Investors should engage in dialogue with the affected communities.**
- Those companies that have not yet disclosed their tailings dam facilities should do so. **Investors should engage in dialogue with these companies and be prepared to divest to push for disclosure.**
- **Investors should publicly disclose their engagement with mining companies** as they often have preferential and better access to companies to push accountability further.

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## End notes

<sup>1</sup> People also speak of 272 deaths in Brumadinho, as two of the 270 deceased people were pregnant at the time of death.

<sup>2</sup> Tailings dams are usually earth-filled embankment dams that collect mine waste, known as 'tailings'; they are often toxic.

<sup>3</sup> Vale refers to Vale SA, where SA refers to Sociedad Anonimia or Limited Company.

<sup>4</sup> Brazil dam collapse: 9 dead and 300 missing after 1m tonnes of mud devastates Brazil, Thomas Mackie, *Express*, 2019, [www.express.co.uk/news/world/1078136/brazil-dam-collapse-vale-dam-Brumadinho-latest-dead-missing-mud-brazil-news](http://www.express.co.uk/news/world/1078136/brazil-dam-collapse-vale-dam-Brumadinho-latest-dead-missing-mud-brazil-news); *Tailings*, Earthworks,

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<sup>5</sup> *Brumadinho, six months after a crime with no remedy*, Brasil de Fato, 2019, [www.brasildefato.com.br/especiais/brumadinho-six-months-after-a-crime-with-no-remedy](http://www.brasildefato.com.br/especiais/brumadinho-six-months-after-a-crime-with-no-remedy)

<sup>6</sup> *Report of the UN Special Rapporteur on the implications for human rights of the environmentally sound management and disposal of hazardous substances and wastes*, Baskut Tuncak, 2020, A/HRC/45/12/Add 2, [www.ohchr.org/Documents/Issues/ToxicWaste/A\\_HRC\\_45\\_1\\_2\\_Add2\\_AUV.docx](http://www.ohchr.org/Documents/Issues/ToxicWaste/A_HRC_45_1_2_Add2_AUV.docx)

<sup>7</sup> *ANM interdita 47 barragens por falta de declaração de estabilidade*, ANM (Brazilian National Mining Agency), 2020, [www.gov.br/anm/pt-br/assuntos/noticias/anm-interdita-47-barragens-por-falta-de-declaracao-de-estabilidade](http://www.gov.br/anm/pt-br/assuntos/noticias/anm-interdita-47-barragens-por-falta-de-declaracao-de-estabilidade)

<sup>8</sup> Mining-Induced Displacement and Resettlement: A Critical Appraisal. John Owen and Deanna Kemp. *Journal of Cleaner Production*, 2014, 87, pp478-488; *Avoiding New Poverty: Mining Induced Displacement and Resettlement*. Theodore Downing, International Institute for Environment and Development, 2002, <https://bit.ly/2N63kvF>

<sup>9</sup> The role of institutional mining investors in driving responsible tailings management, Sally Innis and Nadja Kunz, *The Extractive Industries and Society*, 2020, 7(4), pp1377-1384.

<sup>10</sup> Mining dam failure: Business as usual? Beatrice Labonne, *The Extractive Industries and Society*, 2016, 3(3), pp651-652.

<sup>11</sup> *Right to adequate food and nutrition, and to food sovereignty*, Fian International, 2020, [www.fian.org/files/files/Andrea\\_20201211\\_Papers\\_2\\_Food\\_V\\_2.pdf](http://www.fian.org/files/files/Andrea_20201211_Papers_2_Food_V_2.pdf)

<sup>12</sup> *Partners: Movement of People Affected by Dams (MAB)*, Grassroots International, <https://grassrootsonline.org/who-we-are/partner/movement-of-people-affected-by-dams-mab>

<sup>13</sup> *The Scandal of Inequality 2: The multiple faces of inequality in Latin America and the Caribbean*, Sophie Richmond, Gaby Drinkwater, Luisa Fulcher and Caroline

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<sup>14</sup> *The people affected by dams launch actions to mark two years of Vale's crime in Brumadinho*, 2020, MAB, <https://mab.org.br/2020/12/09/the-people-affected-by-dams-launch-actions-to-mark-two-years-of-vales-crime-in-brumadinho>

<sup>15</sup> *Global Tailings Review*, GlobalTailingsReview.org, <https://globaltailingsreview.org>

<sup>16</sup> *Global Industry Standard on Tailings Management*, GlobalTailingsReview.org, 2020, [https://globaltailingsreview.org/wp-content/uploads/2020/08/global-industry-standard\\_EN.pdf](https://globaltailingsreview.org/wp-content/uploads/2020/08/global-industry-standard_EN.pdf)

<sup>17</sup> Following on from significant reports into tailing dam failures, *Review of tailings management guidelines and recommendations for improvement*, Golder Associates, submitted to ICMM, 2016, [www.icmm.com/tailings-report](http://www.icmm.com/tailings-report); *Tailings Dams: Risk of Dangerous Occurrences. Lessons Learnt from Practical Experiences*, International Commission on Large Dams Bulletin 121, 2001, [www.unep.fr/shared/publications/pdf/2891-TailingsDams.pdf](http://www.unep.fr/shared/publications/pdf/2891-TailingsDams.pdf)

<sup>18</sup> *New Global Industry Standard on Tailings Management aims to improve the safety of tailings facilities in the mining industry*, ICMM, 2020, [www.icmm.com/en-gb/news/2020/new-global-industry-standard-on-tailings-management](http://www.icmm.com/en-gb/news/2020/new-global-industry-standard-on-tailings-management)

<sup>19</sup> *Human rights only with struggle and organisation*, MAB, 2020, <https://mab.org.br/2020/12/10/article-human-rights-only-with-struggle-and-organization>

<sup>20</sup> *Brazil Senate's new bill tightens safety rules for tailing dams in mining industry*, NS Energy, 2020, [www.nsenergybusiness.com/news/brazil-senate-bill-safety-tailing-dams-mining](http://www.nsenergybusiness.com/news/brazil-senate-bill-safety-tailing-dams-mining)

<sup>21</sup> Conversations with MAB representative, 5 January 2021 and 22 January 2021.

<sup>22</sup> *Safety First: Guidelines for Responsible Mine Tailings Management*, Jamie Kneen, Ugo LaPointe, Jan Morrill and Payal Sampat, 2020, [www.earthworks.org/publications/safety-first-guidelines-for-responsible-mine-tailings-management](http://www.earthworks.org/publications/safety-first-guidelines-for-responsible-mine-tailings-management)

<sup>23</sup> *Record of the companies contacted by the Investor Mining and Tailings Safety Initiative, the status of the company responses and a link to their disclosure*, Church of England, 2020, [www.churchofengland.org/media/18152](http://www.churchofengland.org/media/18152)

<sup>24</sup> *Recommendations for incorporating a human rights-based approach in environmental impact assessment of mining projects*, Federación Iberoamericana del Ombudsman, Deutsche Gesellschaft für Internationale Zusammenarbeit and Economic Commission for Latin America and the Caribbean, 2019, <https://repositorio.cepal.org/handle/11362/45095>

<sup>25</sup> *Gender lens to the UNGPs*, Office of the High Commissioner for Human Rights, [www.ohchr.org/EN/Issues/Business/Pages/GenderLens.aspx](http://www.ohchr.org/EN/Issues/Business/Pages/GenderLens.aspx)

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<sup>26</sup> *Engendering Business and Human Rights: Applying a Gender Lens to the UN Guiding Principles on Business and Human Rights and Binding Treaty Negotiations*, Marianna Leite and Matti Kohonen, Christian Aid, 2019, [www.christianaid.org.uk/resources/about-us/engendering-business-and-human-rights](http://www.christianaid.org.uk/resources/about-us/engendering-business-and-human-rights)

<sup>27</sup> *Engendering Business and Human Rights: Applying a Gender Lens to the UN Guiding Principles on Business and Human Rights and Binding Treaty Negotiations*, Marianna Leite and Matti Kohonen, Christian Aid, 2019, [www.christianaid.org.uk/resources/about-us/engendering-business-and-human-rights](http://www.christianaid.org.uk/resources/about-us/engendering-business-and-human-rights)

<sup>28</sup> *Brazil Senate passes bill to limit, fine upstream mining dams*, Reuters, 2020, [www.reuters.com/article/uk-brazil-dams/brazil-senate-passes-bill-to-limit-fine-upstream-mining-dams-idUKKBN25U0BB?edition-redirect=uk](http://www.reuters.com/article/uk-brazil-dams/brazil-senate-passes-bill-to-limit-fine-upstream-mining-dams-idUKKBN25U0BB?edition-redirect=uk)

<sup>29</sup> Tailings impoundment failures: are geotechnical engineers listening? Michael Davies, *Geotechnical News*, 2002, pp31-36.

<sup>30</sup> *Why Miners have failed to prevent waste dam disasters*, Payal Sampat, Earthworks, 2020, [www.ft.com/content/a79f9c89-9d96-4413-97b7-6fa1e7fc4340](http://www.ft.com/content/a79f9c89-9d96-4413-97b7-6fa1e7fc4340)

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