



Neutral Citation Number: [2026] EWCA Civ 502

Case No: CA-2026-000318-Y

IN THE COURT OF APPEAL (CIVIL DIVISION)
ON APPEAL FROM THE HIGH COURT OF JUSTICE
BUSINESS AND PROPERTY COURTS OF ENGLAND AND WALES
TECHNOLOGY AND CONSTRUCTION COURT (KBD)

Royal Courts of Justice
Strand, London, WC2A 2LL

Date: 6/05/2026

Before :

LORD JUSTICE LEWISON

and

LORD JUSTICE FRASER

Between :

MUNICÍPIO DE MARIANA
and the Claimants identified in the Schedules to the
Claim Forms

Respondents/Claimants

- and -

(1) BHP GROUP (UK) LTD
(formerly BHP BILLITON PLC and thereafter
BHP GROUP PLC)

Applicants/Defendants

(2) BHP GROUP LIMITED

Daniel Toledano KC, Shaheed Fatima KC, Nicholas Sloboda KC, Oliver Butler, Daniel Burgess, Tamara Kagan, Maximilian Schlote, Veena Srirangam, Jade Fowler and Michael Kotrly (instructed by Herbert Smith Freehills Kramer LLP) for the Applicants
Alain Choo Choy KC, Andrew Fulton KC and Jonathan McDonagh (instructed by Pogust Goodhead) for the Respondents

Hearing dates : 12 March 2026

Approved Judgment

This judgment was handed down remotely at 10.30am on 6 May 2026 by circulation to the parties or their representatives by e-mail and by release to the National Archives.

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LORD JUSTICE FRASER :

1. These reasons explain the decision of this court on the defendants/appellants' applications both for permission to appeal, and the application for expedition of the appeal. Although they have been given a neutral citation number, that is for administrative convenience, and also because there is a wide public interest in these reasons being publicly available, given the nature of the litigation itself. Given the very wide subject matter of the litigation, these reasons do not fully explain the factual background for a reader without any prior or underlying knowledge of the case. That would be an extensive exercise, and it would be contrary to the overriding objective to spend considerable time explaining in great detail both the case, the parties' respective cases on the considerable number of issues at trial, and the submissions on the application for permission to appeal. These reasons do not quote from the contemporaneous documents or the evidence given at trial, nor the parties' submissions to the trial judge in closing, nor the parties' submissions on the application for permission in respect of which an oral hearing was held. The reasons also assume the detailed knowledge of the papers and the issues which the parties are expected to possess. In terms of authority, it is necessary to cite more than perhaps might be expected, simply due to the approach of the appellants to the issues that are said to arise. However, I have attempted to keep this to a reasonable minimum.
2. This application for permission to appeal relates to the main first-instance judgment of O'Farrell J the trial judge, dealing with liability. This was called the Stage 1 trial. The judgment is at [2025] EWHC 3001 (TCC) ("the main judgment"). However, there are other judgments in this case, which has been before the English courts for some time. Without embarking upon a fully detailed procedural history, in 2020 the claims were all struck out by Turner J on jurisdictional and *forum non conveniens* grounds. That decision was ultimately considered on appeal at [2022] EWCA Civ 951 when Underhill LJ, Popplewell LJ and Carr LJ (as she then was) overturned that decision to strike out the claim, and the case then proceeded. More recently, the Court of Appeal (Lady Chief Justice, Popplewell and Phillips LJJ) in March 2026 heard an appeal relating to a decision by Constable J concerning an application for contempt of court in the context of the defendants seeking an anti-suit injunction from a foreign court. That appeal was allowed at [2026] EWCA Civ 294, and the court held that doing so could not amount to a criminal contempt and the application for contempt should not proceed. There are therefore a number of judgments, both at first instance and on appeal, that deal with the factual background between these parties. These are available both on bailii and on the National Archive, and those judgments should be consulted by anyone desirous of a greater knowledge of the case generally. We are grateful to counsel for the parties for their assistance, and also to the providers of the electronic trial bundle which saved much time both in preparation for the hearing but also in compiling these reasons.
3. The central event at the heart of this case is the collapse on 5 November 2015 of the Fundão Dam in Southeast Brazil. The claimants are very numerous and are all Brazilian. There are over 600,000 of them, and they include individuals, municipalities, utilities, faith-based institutions and businesses, all of whom claim damages for what occurred; a longer description of them appears at [72] in the main judgment. The collapse of the dam was a catastrophic event in which the dam released in excess of 40 million cubic metres of iron ore tailings that became subject to liquefaction. Tailings are essentially a by-product of iron ore extraction, and these were stored behind the dam. Liquefaction is a process by which the tailings, which are solids, behave as though they are liquid. Drainage is a relevant factor both in liquefaction and also in the failure of the dam. After the dam collapsed, these tailings flowed immediately downstream, killing 19 people. They also destroyed at least one village completely and damaged

many more, and continued their downstream course through the Doce River basin for a distance of over 600km. Two weeks later, the tailings reached the Atlantic Ocean. As well as the loss of life and injury, there was very extensive environmental damage. The scale of the damage has been estimated in money terms as being many billions of dollars. Of course, putting a financial figure on that that does not take account of the loss of human life.

4. The dam was owned and operated by Samarco Mineração SA ("Samarco"), a Brazilian company. That company was jointly owned in a joint venture agreement, by Vale S.A. ("Vale") and BHP Brasil Ltd ("BHP Brasil"). The second defendant ("BHP Australia") is the ultimate parent company of BHP Brasil. Between 2001 and 2022 the first defendant ("BHP UK") and BHP Australia (referred to jointly in these reasons as "BHP") operated under a dual listed company structure, with listings both in the UK and Australia. From 2022, all shares in BHP UK were acquired by BHP Australia. These details are taken from the main judgment and for present purposes nothing turns on any distinction between the two defendants/applicants. I shall refer to them in these reasons collectively as BHP for convenience. Vale and BHP settled Part 20 proceedings between them in July 2024 which led to Part 20 proceedings which had been brought by BHP against Vale being discontinued.
5. There have been numerous sets of legal proceedings initiated in Brazil and other jurisdictions around the world arising out of the collapse of the dam. There have also been a number of remediation and compensation schemes. The proceedings in this jurisdiction, as explained further in the main judgment at [5] to [8], have been brought against BHP UK and BHP Australia (collectively referred to in the main judgment as "the BHP Group" or "BHP") and are founded in jurisdictional terms upon the corporate listing of those companies in the UK at the time of the collapse.
6. The main judgment was handed down after a trial that took place between 7 October 2024 and 13 March 2025 ("the liability hearing"). Within that period, the liability hearing occupied 10 formal reading days (which are identified on the face of the main judgment) and 50 days of court hearings. The claimants were represented by 10 counsel, two of whom are leading counsel; the defendants by 14 counsel, four of whom are leading counsel. The main judgment itself runs to 1129 paragraphs, including diagrams and other pictorial aids. After it was handed down, the defendants sought to appeal and this was unsuccessful, the judge explaining her reasons for refusing permission in a further judgment ("the consequential judgment"). This was handed down on 19 January 2026 and is at [2026] EWHC 73 (TCC). She gave permission to appeal on one ground, namely interest on costs.
7. In broad outline only, the governing law of the dispute is Brazilian law and the main judgment found for the claimants on a large number of the issues, including on limitation. I could not do justice to such a comprehensive judgment in only a few lines or paragraphs of summary and I will not attempt to do so. Prior to considering the legal framework, the main judgment considered and ruled upon the cause(s) of the collapse in geotechnical terms, and foreseeability. The main judgment then went on to consider the environmental law, strict liability, fault-based liability, illicit acts and omissions and limitation. It also considered waivers, releases and the standing to sue in this jurisdiction of the claimants that are municipalities. The municipalities are public bodies and are bringing proceedings in their own name in a foreign jurisdiction. Although the claimants were not universally successful on every single issue, they were broadly successful on

a great many of them. A subsequent trial is to be held in the second part of 2027 into 2028 dealing with other outstanding issues including quantum.

8. BHP called seven factual witnesses; the claimants did not call any. There were a total of eight different expert witnesses giving evidence in seven main areas, listed at [80] to [86] of the main judgment, who gave oral evidence before the trial judge. Additionally, the court received a joint statement from another three experts, identified at [87], although it was not necessary to receive oral evidence from them.
9. The list of issues was contained in an agreed document, and this runs to 70 different issues over 28 pages. These are summarised at [90] in the main judgment. The settlement between Vale and BHP resulted in the issues relevant to the Part 20 claim, originally numbered 71 through to 95, being deleted. Notwithstanding those deletions (and that welcome settlement) there remained a sizeable number of separate issues for the judge to resolve. There were also separate lists of issues for geotechnical matters, and also licensing, as in Brazil mines such as the Fundão Dam require licences to operate.
10. The consequential judgment at [39] refers to the 28th witness statement of Mr Michael which explains (in the context of the argument regarding a payment on account of costs) that the total costs by claimants and defendants at that stage of the litigation together exceed £300 million.
11. I provide the above sparse details in order to give some idea of the scale of the litigation. It is also of some assistance in putting the grounds of appeal in this case into context.
12. This litigation is the very definition of a heavy case. The judges of the Technology and Construction Court (“TCC”) are well used to hearing extremely detailed and lengthy cases, with trials lasting many months and enormous amounts of technical and expert evidence. It is also not unusual for such cases, particularly environmental ones, to concern the law of other foreign jurisdictions. However, even by the standards of those cases within the TCC, this case is somewhat notable in scale.
13. Considering the subject matter of the proposed appeal and grounds, determining this application has taken some considerable time. Some applications for permission to appeal can be considered and decided in a few days, or a week or two. It has simply not been possible to decide this one in that timescale, and it has taken far longer. This is as a result of the amount of detail that needs to be considered. The application for expedition arises as a result of the preparation for the next trial which it is said would be saved or potentially redundant were the appeal to succeed. It was necessary both to have a response from the claimants, the respondents, to the application for permission to appeal, and also to hold a hearing, which took place on 12 March 2026. The decision on expedition is essentially parasitic upon the outcome of the application for permission on the liability grounds.
14. I should also make clear that the amount of authority to which I will refer in these reasons is limited. That should not, however, be taken to indicate that I have not considered all the different authorities cited by both the parties in the application for permission and the respondents’ response.
15. The grounds of appeal can be grouped into three discrete areas.

16. Ground 1 is liability under the Environmental Law, namely a decision that BHP are strictly liable as “polluters”. There are two sub-grounds to this ground, namely 1.1 and 1.2 (which is in the alternative to 1.1). Ground 1.2 has (a) to (c) within it.
17. Ground 2 is liability under Article 186 of the Civil Code. This challenges the judge’s findings of fault-based liability. There are two sub-grounds to this, namely 2.1 and 2.2 (although each sub-ground has a number of separate parts, with 2.1 having (a) to (d) and 2.2 having (a) to (c)).
18. Grounds 3, 4 and 5 are limitation grounds.
19. Finally by way of setting the scene, there are three important areas that must be addressed. The first important area is the basis of the appeal, which could also be said to be the way that the judge’s conclusions are challenged by BHP. The central basis of the appeal is not only that there are discrete points upon which the trial judge has been wrong, such that those points should be corrected on appeal. It is that “something has clearly gone wrong in the judicial process and the [main] Judgment needs to be fully scrutinised on appeal”, as it is put in paragraph 4 of the BHP skeleton argument. This is said to be because not only was the decision of the lower court wrong and hence there is reliance upon CPR 52.21(3)(a), but that the decision was unjust because of a serious procedural flaw or other irregularity, relying upon CPR 52.21(3)(b). To quote from BHP’s skeleton again, “the serious irregularity arises out of her failure to engage with BHP’s case”. That latter limb, CPR 52.21(3)(b), was the basis of the application before the trial judge, and therefore the application to this court is a little different to that put before her. This change or addition is said to be as a result of the terms of her consequential judgment.
20. When a party asserts that “something has clearly gone wrong”, and that something is also said to be a serious procedural irregularity, the issue obviously arises – what is it that is said to have gone wrong? Here, the answer to that question is that the judge has “failed to engage” with BHP’s case. That “failure” is itself what is said to constitute the serious procedural irregularity.
21. The assertion that the decisions by the judge were wrong and/or unjust because of serious procedural irregularity arise in respect of Grounds 1, 3, 4 and 5. Ground 2 is simply alleged to be unjust because of serious procedural irregularity.
22. Where it is said in the skeleton for BHP – for example in paragraph 9 dealing with legal principles “in relation to BHP’s submission of procedural irregularity *and* lack of engagement with BHP’s case” (emphasis added) – that is not entirely accurate. The use of “and” between “procedural irregularity and lack of engagement” suggests there is some other procedural irregularity. That is not correct. Upon analysis, it can be seen that it is the alleged lack of engagement by the trial judge that IS the procedural irregularity, on BHP’s case.
23. In all these different grounds therefore, the serious procedural irregularity is what is said by BHP to be that failure by the trial judge to engage with BHP’s case, although Grounds 2.1(c) and 2.2(b) are both said to be a “failure properly to engage with BHP’s pleading objections”. What this essentially means is the “failure to engage” is a failure to allow BHP’s objections to the claimants’ case, based on the pleadings. Those pleading objections are referred to in the judgment, and therefore it is not immediately

apparent how such a failure to engage with them could or did arise. This complaint amounts to a challenge to the decision by the trial judge that the pleaded objections are not valid, or were insufficient to prevent the claimants succeeding on those two points. They therefore will be dealt with separately under “Pleading Objections” below.

24. The alleged failures by the trial judge properly to engage with BHP’s case are factually different for each of the grounds, or sub-grounds. Depending upon how one counts each of the grounds, or sub-grounds within the different numbered grounds, therefore, there are potentially 14 different points upon which the trial judge is said simply to have failed to engage with the case advanced by BHP. These are all points of fact, as the governing law is that of Brazil, and issues arising under the law of a foreign jurisdiction are treated in English law as questions of fact.
25. The second important area is the proper approach of the Court of Appeal to appeals on fact. In *FAGE UK Ltd v Chobani* [2014] EWCA Civ 5, the Court of Appeal heard an appeal against the grant of a permanent injunction preventing Chobani from marketing its yoghurt as Greek yoghurt when it was no such thing. The seminal passages from the judgment of Lewison LJ bear quotation in full, appearing as they do under the heading “Appeals on fact”.

[114] Appellate courts have been repeatedly warned, by recent cases at the highest level, not to interfere with findings of fact by trial judges, unless compelled to do so. This applies not only to findings of primary fact, but also to the evaluation of those facts and to inferences to be drawn from them. The best known of these cases are: *Biogen Inc v Medeva plc* [1977] RPC1; *Piglowska v Piglowski* [1999] 1 WLR 1360; *Datec Electronics Holdings Ltd v United Parcels Service Ltd* [2007] UKHL 23 [2007] 1 WLR 1325; *Re B (A Child) (Care Proceedings: Threshold Criteria)* [2013] UKSC 33 [2013] 1 WLR 1911 and most recently and comprehensively *McGraddie v McGraddie* [2013] UKSC 58 [2013] 1 WLR 2477. These are all decisions either of the House of Lords or of the Supreme Court. The reasons for this approach are many. They include

- i) The expertise of a trial judge is in determining what facts are relevant to the legal issues to be decided, and what those facts are if they are disputed.
- ii) The trial is not a dress rehearsal. It is the first and last night of the show.
- iii) Duplication of the trial judge's role on appeal is a disproportionate use of the limited resources of an appellate court, and will seldom lead to a different outcome in an individual case.
- iv) In making his decisions the trial judge will have regard to the whole of the sea of evidence presented to him, whereas an appellate court will only be island hopping.
- v) The atmosphere of the courtroom cannot, in any event, be recreated by reference to documents (including transcripts of evidence).
- vi) Thus even if it were possible to duplicate the role of the trial

judge, it cannot in practice be done. [115] It is also important to have in mind the role of a judgment given after trial. The primary function of a first instance judge is to find facts and identify the crucial legal points and to advance reasons for deciding them in a particular way. He should give his reasons in sufficient detail to show the parties and, if need be, the Court of Appeal the principles on which he has acted and the reasons that have led him to his decision. They need not be elaborate. There is no duty on a judge, in giving his reasons, to deal with every argument presented by counsel in support of his case. His function is to reach conclusions and give reasons to support his view, not to spell out every matter as if summing up to a jury. Nor need he deal at any length with matters that are not disputed. It is sufficient if what he says shows the basis on which he has acted. These are not controversial observations: see *Customs and Excise Commissioners v A* [2002] EWCA Civ 1039 [2003] Fam 55; *Bekoe v Broomes* [2005] UKPC 39; *Argos Ltd v Office of Fair Trading* [2006] EWCA Civ 1318; [2006] UKCLR 1135.” (emphasis added)

26. In *McGraddie v McGraddie* [2013] UKSC 58 the Supreme Court explained (per Lord Reed) at [1] to [6] the historical basis of the rule going back almost one hundred years to 1919, when the rule was already settled law. Lord Reed also referred to the similar approach to appeals on fact in the Supreme Courts of both the United States and Canada. One pithy quotation on the subject from Lord Hope in *Thomson v Kvaerner Govan Ltd* [2003] UKHL 45 quoted by Lord Reed at [2] is:

“It can, of course, only be on the rarest occasions, and in circumstances where the appellate court is convinced by the plainest of considerations, that it would be justified in finding that the trial judge had formed a wrong opinion.”

27. In cases such as this one involving detailed expert evidence, findings of fact are even more difficult for an aspiring appellant to overcome. In *Thomson v Christie Manson and Woods Ltd* [2005] EWCA Civ 555, a case concerning an auctioneer’s duty of care, and the provenance and date of manufacture of a pair of Louis XV vases (which concerned expert evidence) May LJ said at [141]:

“But, even accepting that individual points such as these are amenable to judicial appellate evaluation whatever the expert opinion, no appellate court should cherry pick a few such points so as to disagree with a composite first instance decision which, in the nature of a jig-saw, depended on the interlocking of a very large number of individual pieces, each the subject of oral expert evidence which the appellate court has not heard.”

28. Yet further so far as expert evidence is concerned, in *Volpi v Volpi* [2022] EWCA Civ 464, the following passages are germane and directly relevant to the approach adopted by BHP on this application for permission to appeal. The issue in the case was whether very sizeable sums advanced to a family member were interest-free loans or a gift. The

trial judge decided they were the former. The recipient of the funds sought to challenge this on appeal. The passages merit reproduction in full:

“[2] The appeal is therefore an appeal on a pure question of fact. The approach of an appeal court to that kind of appeal is a well-trodden path. It is unnecessary to refer in detail to the many cases that have discussed it; but the following principles are well-settled:

i) An appeal court should not interfere with the trial judge's conclusions on primary facts unless it is satisfied that he was plainly wrong.

ii) The adverb "plainly" does not refer to the degree of confidence felt by the appeal court that it would not have reached the same conclusion as the trial judge. It does not matter, with whatever degree of certainty, that the appeal court considers that it would have reached a different conclusion. What matters is whether the decision under appeal is one that no reasonable judge could have reached.

iii) An appeal court is bound, unless there is compelling reason to the contrary, to assume that the trial judge has taken the whole of the evidence into his consideration. The mere fact that a judge does not mention a specific piece of evidence does not mean that he overlooked it.

iv) The validity of the findings of fact made by a trial judge is not aptly tested by considering whether the judgment presents a balanced account of the evidence. The trial judge must of course consider all the material evidence (although it need not all be discussed in his judgment). The weight which he gives to it is however pre-eminently a matter for him.

v) An appeal court can therefore set aside a judgment on the basis that the judge failed to give the evidence a balanced consideration only if the judge's conclusion was rationally insupportable.

vi) Reasons for judgment will always be capable of having been better expressed. An appeal court should not subject a judgment to narrow textual analysis. Nor should it be picked over or construed as though it was a piece of legislation or a contract.

[3] If authority for all these propositions is needed, it may be found in *Piglowska v Piglowski* [1999] 1 WLR 1360; *McGraddie v McGraddie* [2013] UKSC 58, [2013] 1 WLR 2477; *Fage UK Ltd v Chobani UK Ltd* [2014] EWCA Civ 5, [2014] FSR 29; *Henderson v Foxworth Investments Ltd* [2014] UKSC 41, [2014] 1 WLR 2600; *Elliston v Glencore Services (UK) Ltd* [2016] EWCA Civ 407; *JSC BTA Bank v Ablyazov*

[2018] EWCA Civ 1176, [2019] BCC 96; *Staechelin v ACLBDD Holdings Ltd* [2019] EWCA Civ 817, [2019] 3 All ER 429 and *Perry v Raleys Solicitors* [2019] UKSC 5, [2020] AC 352.

[4] Similar caution applies to appeals against a trial judge's evaluation of expert evidence: *Byers v Saudi National Bank* [2022] EWCA Civ 43, [2022] 4 WLR 22. It is also pertinent to recall that where facts are disputed it is for the judge, not the expert, to decide those facts. Even where expert evidence is uncontroverted, a trial judge is not bound to accept it: see, most recently, *Griffiths v TUI (UK) Ltd* [2021] EWCA Civ 1442, [2022] 1 WLR 973 (although the court was divided over whether it was necessary to cross-examine an expert before challenging their evidence). In a handwriting case, for example, where the issue is whether a party signed a document a judge may prefer the evidence of a witness to the opinion of a handwriting expert based on stylistic comparisons: *Kingley Developments Ltd v Brudenell* [2016] EWCA Civ 980.”

29. The emphasis at [2](iii) in the quotation above has been added by me. It is directly relevant to the way that BHP has approached this appeal.
30. Further, this is an appeal from the TCC as I have said. Although there is no special test for permission to appeal such judgments, Coulson LJ explained and summarised the principles at [17] of *Wheeldon Brothers Waste Ltd v Millenium Insurance Co Ltd* [2018] EWCA Civ 2403. He stated

"17. In those circumstances, I consider that the applicable principles can be summarised as follows:

i) The CPR provides a single test for applications for permission to appeal which covers the entirety of the High Court, including the TCC (*Virgin Management*).

ii) Any application for permission to appeal on matters of fact or evaluations of expert evidence must surmount the high hurdle identified in *Fage, Henderson, Thomson and Grizzly Business*.

iii) In addition, because a judgment in the TCC is likely to involve i) detailed findings of fact in an area of specialist expertise (*Virgin Management and Skanska*) and/or ii) lengthy and interlocking assessments of both factual and expert evidence (*Skanska* and *Thomson*) and/or iii) factual minutiae which is difficult or impossible sensibly to reconsider on appeal (*Skanska*), the Court of Appeal will be reluctant to unpick such a judgment (*Thomson*), with the inevitable result that obtaining permission to appeal on such matters in a TCC case may be harder than in other, non-specialist types of case (*Virgin Management, Skanska* and *Yorkshire Water*)."

31. In BHP's skeleton argument, it rightly accepts the existence of what has been called "a high bar" for any appeal. However, in my judgment, by focusing upon what is said to be a failure by the trial judge to engage with its case, it seeks to avoid that bar. Given the only way any appellate court can consider how the trial judge has reached their conclusions in their judgment is by reading the judgment itself, it is axiomatic that

BHP's approach involves two specific activities. The first is subjecting the judgment to a minute textual analysis; the second is assuming that because this trial judge has not mentioned a specific piece of evidence or line of argument, she has overlooked them. Both of those activities are, in my judgment, equally and importantly misplaced.

32. The third important area to address is what would occur if the appeal were to succeed. BHP submit that the judge ought not to have applied the multifactorial approach in concluding that BHP were strictly liable. If they are right about that, this would be dispositive on Ground 1. However, if they are wrong about that, and the multifactorial approach was correct, their alternative approach on this ground is to rely upon three alleged critical flaws by the trial judge in the multifactorial approach. They accept that if they succeed in this avenue of attack and the judge were found to have made such critical flaws, this would require a retrial. This is because BHP accept "that it is unrealistic to expect this Court to substitute its own evaluation and application". Further, because the claimants advanced fault-based liability in the alternative, even if BHP succeeds on strict liability, that second alternative case would still need to be reconsidered. A retrial would, in the events of a successful appeal, be almost certainly required. However, BHP also state regarding that retrial (in a footnote) "that there is no reason why further oral evidence should be required, in circumstances where (a) there was no problem with the conduct of the trial, and (b) there is a complete transcript of the evidence adduced." It is also said in paragraph 17 of the BHP skeleton that "if BHP were to succeed on the appeal, there would then need to be a retrial. A retrial of some kind is inevitable because – even if BHP succeed on strict liability....- the appeal on fault-based liability will require a retrial....This is an exceptional case where the need for a retrial (of some kind) is the only just course....".
33. Thus it is accepted that a re-trial would be required. A re-trial is said to be "the only just course". However, that re-trial is said by BHP *not* to need to hear any witnesses give oral evidence, with the new trial judge instead reading the transcripts of those days of previous cross-examination in place of hearing the witnesses. It is therefore submitted that an adequate or sufficient re-trial – which is obviously a re-hearing – could be achieved or accomplished simply by the next judge reading the transcripts alone. I find this to be an extraordinary submission. It fails entirely to appreciate the function of oral evidence, and the important way that trial judges assess and decide which evidence they accept, and which they reject. They do this by observing the witnesses, taking into account how questions are answered, how the witnesses react and behave, observing their demeanour, as well as taking account of what they actually say. There have been a great number of judgments over the years in which the unique position of a trial judge has been explained; such a judge sits ideally placed to judge and assess both the witnesses and the evidence precisely because they do see the witnesses in court.
34. It may even, potentially (and subject to hearing arguments on how such a serious procedural irregularity impacted the fairness of the trial) have to be a full and complete re-trial, based upon what is said by the Supreme Court in the case of *Serafin v Malkiewicz* [2020] UKSC 23 (per Lord Wilson at [49]):

"What order should flow from a conclusion that a trial was unfair? In logic the order has to be for a complete retrial....Lord Reed observed during the hearing that a judgment which results

from an unfair trial is written in water. An appellate court cannot seize even on parts of it and erect legal conclusions upon them.”

35. The reason that findings of fact by trial judges are given the primacy they are in the numerous authorities is precisely because it is they who *have* seen the witnesses give their evidence, and seen them tested in cross-examination. I refer to the passage quoted above from my lordship Lewison LJ in *FAGE*, in particular at [114](v) “the atmosphere of the courtroom cannot, in any event, be recreated by reference to documents (including transcripts of evidence)”. That statement must sensibly apply as much to a re-trial on the documents only – which it what is being suggested by BHP - as it does to an appeal.
36. I also refer to Lord Hodge in *Perry v Lopag* [2023] UKPC 16 who said at [14]

“Fourthly and more widely, where the first instance judge is dependent upon the evidence of foreign law experts, who disagree as to the interpretation and application of a foreign law, and has to decide issue by issue whose evidence to prefer, the judge will have regard to all the evidence presented to him. The judge will reach a view based on an assessment of each expert having regard to each expert's evidence as a whole, and the way in which each expert answered the questions posed in chief and on cross-examination to justify his or her opinions. The judge will thus evaluate the experts' reasoning. Not all the matters which have influenced the judge in forming a view on which evidence to prefer will always be recorded in any detail in a judgment or can be ascertained from reading a transcript of the proceedings.” (emphasis added)
37. I consider that the only logical way that the case could proceed were a successful appeal to occur would be for there to be a proper retrial (with oral evidence) either of those issues that had been overturned on appeal, or of everything, conducted by another judge. I do not see how it could be that asking a judge to read the transcripts of evidence already given could begin to come close to what is required.
38. BHP’s approach to the trial judge’s failure to engage also requires a reversal of the assumption explained at [2](iii) in *Volpi*. Rather than assuming – absent a compelling reason – that the trial judge had taken all the evidence into account notwithstanding it is not specifically identified and addressed, this court is effectively being asked to conclude that unless the trial judge has expressly dealt with a piece of evidence, this demonstrates a failure to engage with BHP’s case. This is simply another way of saying she has failed to take that evidence into account, or failed to give it the weight that BHP considers it ought to have been given. In my judgment such an approach would be wrong in law.
39. To demonstrate the risks of the court making such an assumption, even if it were permissible, I therefore refer to the scale of this case. The final day of closing submissions in the trial was in March 2025, and the judgment was handed down in November 2025. It is over 100,000 words in length; during that interval the judge would have been involved in an exercise of considerable industry. Requiring any individual trial judge to deal with every single piece of evidence, every single document, and all

of the different arguments advanced by the parties – particularly where, as here, each side has a formidably resourced counsel team – would be to impose upon her a herculean task. It would also be contrary to the overriding objective.

40. It is said by BHP that the “present situation” is “seriously problematic” because the findings made by the trial judge “have been made without proper consideration of the contrary arguments that had been advanced to the Court at trial.” Essentially, BHP is seeking conclusions from this court that rest upon this submission: unless a specific argument which BHP advanced in the trial has been individually dealt with and explained fully to their satisfaction, the trial judge has not sufficiently engaged with it. That as an exercise is rather the reverse of what this court ought to undertake.
41. Having made those general comments, I now turn to each of the different grounds individually.

Liability

42. Tailings are essentially a by-product of ore extraction, and is a term which refers to the non-valuable part that remains. Liquefaction is a process by which the tailings, which are solids, behave as though they were liquid. Drainage is a relevant factor in liquefaction. There were significant issues between the parties concerning the collapse of the dam and foreseeability. The judge summarised this in the following way:

“[91] There is consensus that the immediate cause of the collapse of the Fundão Dam was liquefaction of the tailings making up the structural portion of the dam. The probable mechanism was lateral extrusion of the slimes, causing reduction of lateral confinement of the overlying uncompacted and saturated sands, resulting in liquefaction failure.

[92] The dispute is centred on whether it was known, or should have been known, by those responsible for tailings storage at the dam, that the stability of the dam was compromised before the collapse; whether it was reasonable to continue to raise the height of the dam; and whether it was foreseeable that the dam was likely to suffer a liquefaction collapse.

[93] The Claimants' position is that the liquefaction risks were readily foreseeable and detectable prior to the collapse; this did not depend on the identification of any precise liquefaction trigger. It was apparent by August 2014, at the latest, that the dam was showing serious signs of distress, and that further raising of the crest should have stopped until the dam was made safe.

[94] BHP's position is that lateral extrusion as a trigger for liquefaction was not widely recognised; there was not any recognised process to test for lateral extrusion; and therefore failure by liquefaction flowslide was unforeseeable. There were uncertainties regarding the reliability of the data and methods used by the Panel to ascertain the cause of collapse, which were

undertaken with the benefit of hindsight. Far from any warning that the dam might be compromised, the reports produced by independent engineers prior to the collapse indicated that the dam was in a condition of satisfactory stability.”

43. By the Panel, the judge was referring to the Report published on 25 August 2016 by a Panel that investigated the immediate cause of dam failure, which had been commissioned by BHP Brasil, Vale and Samarco. Cleary Gottlieb Steen & Hamilton LLP, a law firm, was engaged to conduct the investigation with the assistance of a panel of four specialist geotechnical engineers (“the Panel”). The Panel established the circumstances in which the dam collapsed; the modification of design which had occurred to the dam, the main difference being unsaturated sand and then saturated conditions; the conditions that developed leading to what is called a flowside; and why that had occurred when it had in 2015.
44. Because the purpose of the Panel Report was to ascertain the immediate causes of the collapse, and in doing that the Panel had understandably used detailed historical, laboratory and computer modelling analysis, using the benefit of hindsight, the task of the trial judge was rather different. She was concerned with arguments, on the basis of the factual and expert evidence, regarding the probable underlying causes of what had occurred, foreseeability of the risk and legal responsibility for the collapse. Although she did hear geotechnical expert evidence, the majority of the expert evidence she heard was from a number of different Brazilian legal experts.
45. BHP accept that in relation to the contention that the trial judge made critical errors in her findings on Brazilian law, BHP will have to demonstrate that the Judge got it plainly wrong. By “plainly wrong”, this means that her findings must be unsupported by evidence or otherwise irrational. It is accepted by BHP that this is a high threshold.
46. BHP submit that there is “greater scope” for the appellate court to interfere with the trial judge’s application of foreign law to the facts; nonetheless, BHP accepts that it is necessary to demonstrate an error in principle.
47. The approach of the English court to matters of foreign law have been recently considered by the Privy Council in *Perry v Lopag* [2023] UKPC 16, and other cases such as *Banca Intesa Sanpaolo and another v Comune di Venezia* [2023] EWCA Civ 1482. Brazil is a member of what is sometimes called the Lusophone Commonwealth. Given the law of Brazil is a civil code country, and the language of that country is Portuguese, this is at the far end of the spectrum of legal systems familiar to an English judge or common law jurist. The origins of the law of Brazil are also Portuguese. Portugal has its legal roots both in the Napoleonic code but also the Roman-Germanic tradition. Therefore also Brazilian law draws on these historical foundations from its connections with Portugal. Accordingly, the trial judge has not only seen the expert witnesses but will have been assisted not only with their opinions on the texts but also the meanings and nuances of language. The appellate court is at a significant disadvantage compared to the trial judge in this respect; it is only when the foreign law is a common law system with similarities to the law of England and Wales that there is not such a great disadvantage. Here, with the legal system of Brazil being somewhat removed from that of England and Wales – indeed, any common law system - that means this appellate court is in a far worse position than the trial judge in assessing the expert evidence of Brazilian law.

48. I do not therefore accept that in this case there is “greater scope for the appellate court to interfere”, as submitted by BHP.
49. Turning to BHP’s submission of procedural irregularity and lack of engagement with BHP’s case, BHP submits that the court must address “at least the central arguments raised by the losing party, and must explain why they were rejected”. The “building blocks of the reasoned judicial process” must be present in the judgment, meaning that (a) the issues which need to be decided are identified, (b) relevant evidence is marshalled, and (c) reasons are given as to why a particular piece of evidence is accepted or rejected.
50. I accept that the basic building blocks are required. However, those building blocks, so far as expert evidence is concerned, will primarily be the opinions of those experts, particularly given the nature of the Brazilian legal system. In any trial, but particularly one which raises issues such as in this one, where there are experts, it is the experts who will have considered the detailed primary material, the contemporaneous documents and other factual evidence, and will also usually have had meetings with one another, seeking to find agreement on some areas where that is possible. These experts prepare and exchange detailed expert reports. It is those views and their expert reports that the judge will usually consider, together with their answers in oral evidence. The underlying material is the stratum upon which those opinions rest. This means that the “building blocks of the reasoned judicial process” will usually be the judge’s view of the differing experts’ views, which experts and opinions are preferred and which are not, and why. A judge is required to explain this. What they are not required to do is to address every piece of the underlying material upon which the opinions are based.
51. What BHP has done in this application is to pick some very isolated contemporary documents and invite the appellate court to look at these in isolation. Ms Fatima KC did this extensively in attempting to show that, in respect of the judge’s findings at [803], there were documents or points that were contrary to the judge’s overall findings, for example ITRB reports or Failure Modes and Effects Analysis documents, or FMEAs. However, this is the very definition of “island-hopping”. I am sure BHP can find any number of other documents that show, internally, a certain view was being taken of the dam, or reported about it. That is rather off the point. The point is whether the judge reached conclusions that are not rationally supportable, or that were not properly open to her. Island hopping is not an exercise that will lead to a balanced picture being obtained of the evidence.
52. Ground 1 relates to the judge’s finding that BHP are strictly liable as “polluters” under the Environmental Law. Ground 2 relates to the finding of fault-based liability. BHP must succeed on both grounds in order to overturn the findings of liability.

Ground 1: strict liability

53. The Judge held that BHP were strictly liable as polluters, under Article 3(IV) of the Environmental Law. This provides that “a polluter is a natural or legal person, of public or private law, that is directly or indirectly responsible for any activity resulting in/causative of the degradation of environmental quality” – because they were “directly and/or indirectly responsible for the activity of Samarco which caused the collapse”. This is said by BHP to have been the wrong test. BHP’s case was that only the operator of the activity could be the direct polluter, and BHP did not operate the dam. This

operator was Samarco, and it was the entity that held the relevant licence for the mining activity. So far as indirect polluters are concerned, BHP submits that such liability can only arise or exist where there is a duty of safety in relation to the activity, and BHP neither owed nor breached any such duty.

54. In this respect BHP submits that the “correct test” was agreed by the experts. The claimants’ expert on this issue was Professor Sarlet. The expert for BHP was Professor Dantas. He actually acted in substitution for the original expert for BHP, Professor Édis Milaré, who was forced to withdraw from the case as a result of ill-health, but nothing turns on that and I mention it solely for completeness.
55. Consideration of this issue starts at [386] of the main judgment and the claimants’ and BHP’s respective cases are summarised there.

“[386] The Claimants' case is that BHP are liable as a polluter because they are both directly and indirectly responsible for the activity which caused the collapse:

i) BHP (and Vale) exercised controlling power, supervision and influence over all aspects of Samarco's operations, acting in their own interests.

ii) Through the Samarco Board, BHP (and Vale) made decisions which were connected to both the creation, development, and operation of the dam and the direct and indirect causes of the collapse; in particular, the P3P Project, the P4P Project, Project 940, and the disposal of Vale's Alegria tailings behind the dam.

iii) BHP representatives, acting inside and outside the Samarco Board, committees and sub-committees, directly participated in the development and implementation of measures intended to mitigate and manage the risks of the activity, including the risk of a collapse of the dam.

iv) BHP substantially invested in the mining and tailings disposal activity and derived substantial financial and commercial benefits from the same.

[387] The Defendants' position is that BHP are not a direct polluter because they did not own or operate the dam; and they are not an indirect polluter, even on the Claimants' proposed test.

i) Even if, which is disputed, BHP-affiliated individuals participated in the governance of Samarco, through the Samarco Board or through its committees and sub-committees, that would merely amount to the exercise of controlling shareholder power, which is not sufficient to establish liability.

ii) Approval of the P3P Project, the P4P Project and Project 940 does not establish liability and BHP's involvement

in them, when compared to the significant roles and responsibilities of Samarco's large and well-resourced project teams, was fairly peripheral. Likewise, BHP did not have control over the disposal of the Alegria tailings by Vale. In any event, none of these projects or activities materially caused, or contributed to, the collapse.

iii) BHP had no control over, and did not directly participate in, the management of the risk of collapse of the dam, or in health and safety matters. The fact that BHP sought to influence or monitor Samarco in respect of such matters does not amount to control and is insufficient to impose responsibility for the activity.

iv) The Claimants' reliance on BHP's funding of Samarco and the benefits they obtained from their interest in it do not, alone, give rise to liability”

56. In my judgment, [387] plainly summarises the case advanced by BHP both then, and on this appeal. BHP’s case is that they were not a direct polluter because they did not own or operate the dam; that entity was Samarco, and BHP also (or collectively) rely upon the fact that it was Samarco which had the relevant licence. BHP also maintained both at the trial and now that they are not an indirect polluter, even on the claimants' proposed test (which is the multifactorial test). The trial judge plainly understood this, and recited that understanding both in these summary paragraphs, and indeed throughout this section of the judgment which runs to the conclusion at [523].
57. The relevant activity in this case was the activity of mining and the storage of iron ore tailings in the Fundão Dam. It is not disputed by BHP that this activity caused environmental degradation and damage such that it is a polluting activity under the Environmental Law. Therefore the issue for the judge to decide was whether BHP was a direct polluter, which depended on control/operation; and/or whether BHP was an indirect polluter. This is precisely the case considered by the judge in the 140 paragraphs in section 9 of her judgment.
58. In supporting its submissions on this ground, BHP alleges that Professor Sarlet accepted its case as to the conceptual distinction between direct and indirect polluter. This is put in different terms in different places in BHP’s skeleton, both in the text and also the heading against C1 at paragraph 22, for example. It has variously been described to us as “agreed expert evidence” but also in oral submissions before us as a “concession” by Professor Sarlet.
59. However, portraying it as such is, in my judgment, simply wrong. There are three points to be made here.
60. Firstly, this conceptual distinction was no part of any formal experts’ written agreement between the relevant experts - either Professor Sarlet and Professor Dantas, or Professor Sarlet and Professor Milaré, before he had to withdraw. It cannot be, properly so called, part of an experts’ agreement. It was not therefore agreed in that sense.

61. Secondly, the transcripts of the cross-examination relied upon by BHP for this application do not support a submission that Professor Sarlet accepted BHP's case on this point in the terms contended for. Those phrases or parts of his answers are deployed by BHP on this application out of context, and pay no attention to the whole of his answers on this line of questioning.
62. Thirdly, this point was advanced before the trial judge in closing submissions by BHP, who alleged that Professor Sarlet had made this "concession". The claimants produced a "Corrections Table" of relevant answers in cross-examination by Professor Sarlet specifically to deal with this, and challenging the assertion that Professor Sarlet had "agreed" with BHP's case. The trial judge expressly considered this point, and whether or not there was any distinction between direct and indirect polluters in her judgment between [292] and [296], which included extracts of Professor Sarlet's oral evidence at [292] and [295]. She rejected BHP's case and was ideally placed to come to a conclusion on that.
63. I fail to see how it can properly be described as a concession by Professor Sarlet at all. When this point was explored in oral exchanges with counsel for BHP on the hearing of this application, we were told that this was one of lots and lots of disputes at a very granular level" and that we did not need to resolve whether it was a concession or not at the permission stage. It was however accepted by BHP that at the appeal stage, the court would need to be persuaded of it.
64. I disagree with that approach on an application such as this one. If one part of an appellant's case is that a finding by a trial judge on an important expert issue is contrary to an experts' agreement, or that an expert made an important concession that was effectively ignored by the trial judge, then the place to start when considering an application for permission to appeal on that ground is to decide whether it is reasonably arguable that there was such an agreement or concession by that expert. It is necessary to decide at the permission stage whether it is reasonably arguable that is what in fact had occurred. Permission to appeal is an important filter.
65. It is also said by BHP that the judge's explanation in her consequential judgment that BHP's case as to the conceptual distinction between direct and indirect polluter had been put to Professor Sarlet, but he had not accepted it, was "impossible to reconcile with the evidence cited" by BHP in its skeleton. I disagree with that submission. Firstly, the trial judge is best placed to explain or summarise what had been put to an expert in the trial itself, what had not, and whether that expert had accepted those points in cross-examination or not. But secondly and in any event, when one reads the extracts of the evidence of Professor Sarlet, including in the claimants' Corrections Table, it can be seen that Professor Sarlet expressly did *not* accept BHP's case. BHP on this application, as it did in closing submissions in the trial, seems fixated on the concept that Professor Sarlet had accepted its case. That conclusion is not supportable on a fair reading of the transcripts of his evidence. Stating "concession" repetitively does not make it an accurate description.
66. All of the expert evidence on the Environmental Law, both of Professor Sarlet and Professor Dantas, is entwined together. It is not possible to pick at only some strands and consider questions and answers in isolation or out of context. We are told that these two experts alone gave evidence over seven court hearing days. It is simply not possible to look at one tiny puzzle piece in the way contended for by BHP, but even doing so,

when that puzzle piece is the alleged concession contended for here, it can be seen that BHP is wrong. In my judgment, there was no alleged concession by Professor Sarlet on this point. His evidence must be taken as a whole – as indeed must all expert evidence. He did not agree with BHP’s case in this respect.

67. I do not consider it to be reasonably arguable that the trial judge was wrong to hold that BHP are strictly liable as polluters under Article 3(IV) of the Environmental Law. Her findings were not unsupported by evidence; on the contrary, there was ample evidence before her to justify her findings. Nor were these findings irrational. BHP do not come close to crossing the threshold necessary to challenge these findings on appeal. The trial judge did not apply the wrong test, nor were her findings contrary to the expert evidence which BHP says was agreed. It is not reasonably arguable that the conceptual distinction point was agreed by Professor Sarlet.
68. There is simply no basis for any claim that the trial judge “failed to engage” with BHP’s case on this issue, which is the alternative to the submission that she was wrong. I do not consider that to be a valid submission. She did engage with the case; she did, however, prefer the claimants’ case.
69. I turn therefore to the alternative element of Ground 1, which is that if the multifactorial approach were correct, the judge made three critical flaws. These are said to be as follows (in summary only).
 - (a) that BHP having and exercising controlling shareholder power was not of itself sufficient, with what was required was the use of such power in respect of Samarco’s detailed business decisions and operations, the trial judge wrongly relied extensively on the existence and mere exercise of controlling shareholder power by BHP (and Vale).
 - (b) in finding that BHP (and Vale) used their powers under the Samarco Shareholders’ Agreement to exercise control over Samarco and so were strictly liable, she “failed to engage with extensive evidence establishing that BHP did not use their controlling shareholder power to make detailed business decisions on behalf of Samarco or to run its operations”.
 - (c) the judge in any event applied the wrong approach to causation, which it is said is contrary to the agreed expert evidence. The judge is said to have wrongly proceeded on the basis that it was not necessary to establish factual causation between a defendant’s act or omission and the damage; and wrongly held that the relevant causal standard in cases under the Environmental Law was equivalence of conditions. It is therefore said that the judge failed to consider, as she should have done, whether the dam collapse was a necessary consequence of any act or omission by BHP in the context of strict liability.
70. If BHP are wrong and fail to succeed on the first part of Ground 1, the so-called multifactorial approach was the correct test. Given my findings on the first part of Ground 1 above, the judge’s conclusions on that are not challengeable on appeal, which means that the trial judge applied the correct test to the facts.
71. Turning to the three so-called “critical flaws”, (a) and (b) are purely challenges to the trial judge’s findings of fact on two connected issues. The first is the extent to which

BHP had certain powers, including under the Samarco Shareholders' Agreement ("SSA") to exercise control over Samarco. The second is the extent to which this occurred.

72. At the oral hearing of this application, we were shown the terms of the SSA, and taken to certain contemporaneous documents which were said to demonstrate how little, if anything, BHP had to do with the operation of the mine and involvement with certain specific projects such as the P4P project. This was the acronym given to the fourth pellet plant, part of the five-year growth strategy. However, not only is this dealt with in the judgment expressly at [496] to [508], but other projects such as P3P and also Project 940 are as well. Project 940 was the project to raise the dam height, which is referred to in the geotechnical evidence and analysis by the judge of Dr Marr's answers in cross-examination. Raising the height of the dam was an important factor in the collapse. Concentrating on just one project, P4P, and ignoring the others, demonstrates the danger in only considering isolated parts of the evidence before the trial judge.
73. The subject of responsibility for the activity and control of Samarco and the mine is considered at [389] to [522]. The trial judge considered ownership, the SSA, and a number of other matters including the different committees at [428], all of which had BHP representation upon them. This particular latter paragraph concludes:
- "This afforded BHP and Vale the opportunity to influence and control Samarco's business beyond high level strategy and direction, extending into operation of the business."
74. That conclusion cannot in my judgment be said to be irrational, or not properly open to her. Her conclusions at [449] and in particular [450] are paradigm examples of findings that any trial judge reaches on the whole ocean of factual material before them:
- "[450] It is evident from the contemporaneous documents that the BHP Iron Ore Brazil team were involved in the activities of Samarco at every level, from strategic decisions and dividend shares to detailed operational matters at Samarco." (emphasis added)
75. She also found at [522] "Regardless of the label attached to it, Samarco did not operate as an independent, arms' length company. From its corporate objectives through to operational management and activities, in practice, it was controlled and operated by BHP and Vale."
76. These types of factual findings, after a five month trial lasting 50 hearing days, cannot be readily disturbed or challenged on appeal, without being "convinced by the plainest of considerations" that this is required. There is nothing in this case, or these grounds, that suggests to me that is justified here.
77. Here, the claim that the trial judge "failed to engage" with BHP's case on this issue, or groups of issues, is baseless and does not come close to providing that justification. Firstly, I refer to the assumption required under the approach set out in *Volpi*. Secondly – and taking the P4P project as an example – BHP's involvement in that project was expressly considered by the trial judge and dealt with in the judgment. BHP's submissions on this ground to this court were more akin to a re-run of the type of closing

submissions that would be made to a trial judge, rather than points taken on appeal. However, even had they not been, other projects such as Project 940 and P3P had to be considered by the judge to obtain an overall view of control by BHP, not just a single project. Complaint is made that the judge concentrated on what was called “the BHP side of the ledger” in terms of control, and ignored what was called “the Samarco side of the ledger”, which was evidence coming from Samarco to the effect that (as it was put orally) “it was Samarco that planned and executed and therefore controlled the projects”. Reliance is placed on some 70 pages in an annex to the formidable closing submissions lodged by BHP that are said to demonstrate this, and it is said that the judge failed to engage with this evidence.

78. Throughout the whole of the arguments advanced by BHP on this ground – risk and audits, projects, financial investment and benefits – the non-existent (or subservient) role of BHP and Vale is emphasised, supported by references to the evidence said to support this submission, that was before the trial judge. However, it simply cannot be said that the trial judge did not deal with these, or failed to engage with BHP’s case. The judgment, read fairly and as a whole, considers these matters. It is true that not every single document is recited, but that is not what is required in any judgment, but particularly one such as this dealing with such a wide range of disputes.
79. BHP’s complaints come down to its arguments on the issue not being accepted by the trial judge, or not being given the weight BHP considers they ought to have been given, rather than anything else. I refer again to the assumption required of any appellate court that all of the evidence and material has been taken into account by the trial judge. It certainly appears to me that sufficient consideration was given to the case advanced by BHP on this point to make it clear why the judge reached the conclusions as she did. Further, the weight to be attributed to different pieces of evidence is the province of the trial judge. The evidence from Samarco saying control was entirely the province of Samarco, and nothing to do with BHP, was not given much or any weight, but this is not only understandable - particularly given the ownership structure of Samarco – but was a conclusion the trial judge was entitled to reach. It may also be that having considered carefully “the BHP side of the ledger” the trial judge concluded that more weight be given to that, as it appeared to her that BHP *did* exercise control, particularly given the involvement of BHP personnel on all the different committees, and their function. She was ideally placed to consider the role of the Samarco Executive Board, the Samarco Board, the true scope of the risk and audit functions, funding (whether by loan or otherwise) and then come to the conclusions she did on control. The exercise of island-hopping required by BHP’s submissions on this ground is an invalid one when subjecting a judgment such as this one to appellate review.
80. Yet further, these points are essentially challenges to the judge’s findings of fact, which have been disguised or otherwise labelled as serious procedural irregularities. There is no sensible basis for interfering with the judge’s findings on either of these two factual areas.
81. The third of these is causation. Causation generally is highly fact-specific, which is not a promising start for BHP. BHP’s case on this is that the judge considered the wrong test. Although BHP accept that Professor Sarlet’s written evidence was that there was no need for factual causation between the defendant’s conduct and the damage (i.e. it was sufficient to establish a causal link between the polluting activity and the damage), BHP maintain that in his oral evidence Professor Sarlet agreed with BHP’s experts that

factual causation between the defendant's conduct and the damage was needed to establish liability under Brazilian law.

82. There are two specific points that arise. Firstly, the judge expressly considered the need for a causative link. There was a great deal of Brazilian law relied upon by each of the two experts who dealt with this issue, namely Professor Sarlet and Professor Dantas. A most important case in this area is the case of *Vicuña*. This is a decision of the STJ that had been decided by a 10-justice panel under the repetitive appeal procedure. This case, and the competing expert views of the two professors who gave oral evidence to the trial judge is dealt with extensively at [333] to [342] of the main judgment. At [343] the judge turned and considered how Justice Salomão (one of the justices in the *Vicuña* case) had considered the judgment of Reporting Justice Bellizze in the *Brazuca* STJ Special Appeal No. 1.615.971 (2016), which concerned a claim for contribution between the two defendants held liable for environmental damage in the *Brazuca* case. In that case, the Brazilian Court had held that civil liability (whether strict or fault-based) required a causal link between the damage and the commission or omission of the perpetrator. Such causal link must be assessed on the basis of the theory of adequate causality under Article 403 of the Civil Code. She then returned to the views of Professor Dantas on the *Vicuña* case at [349]. This analysis then also dealt with the subsequent case of *Gold* STJ Special Appeal No. 1.816.808 (2019) at [351], and led to her conclusions on this subject which are set out extensively at [352] to [361]. I will not reproduce those passages in these reasons, as that would simply lead to this being even longer than it is already. However, they should be considered as though repeated here.
83. There was plainly no consensus between the experts as to the nature of the causal link required between the polluter's conduct and the damage, and the judge considered the competing views of the experts against the written law and STJ case law. She explained her conclusions on the applicable principles of causation for environmental civil liability in that part of her judgment from [352] onwards.
84. BHP in its skeleton argument contended that "the judge did not analyse any of the underlying case-law in reaching [the] conclusion [which is at [330]] nor the expert evidence in respect of those cases". I do not see how that can be an accurate submission. Between [297] and [321] the judge reviewed in detail the facts and reasoning of nine different STJ decisions. This submission is not tenable.
85. It is readily apparent from the main judgment that, contrary to the submissions on this point by BHP, the trial judge expressly considered the issue of the need for causality between the defendant's conduct and the damage. I do not see that it can be properly contended otherwise. The suggestion that the trial judge failed to consider the requirement of factual causation between BHP's conduct and the damage itself for liability to arise is not reasonably arguable.
86. The judge's application of the multifactorial approach was an evaluative exercise based on all the material before her, in relation to which BHP does not come close to showing either an error of principle or a "failure to engage" with BHP's case such that there was a serious, or indeed any, procedural irregularity.
87. Accordingly, I would refuse permission on each element of Ground 1, strict liability. I turn therefore to the next ground of appeal, which concerns fault-based liability.

Ground 2: fault-based liability

88. This was an alternative case advanced by the claimants, as if the strict liability against BHP were successful (which it was) the fault-based liability case would not necessarily arise. The same applies on this application to Ground 2 – it is an alternative case - given my conclusions on the refusal of permission on Ground 1. However, I will address the arguments in summary form. There were three strands to the alternative case advanced by the claimants, explained at [535] to [540] of the main judgment.
89. The primary case was pursuant to Article 186 of the Civil Code, and alleged that BHP by negligent conduct (commission or omission) caused the collapse of the dam. It was said that BHP had a positive duty to mitigate the risk of a collapse arising from their creation and/or contribution to the risk and/or voluntary assumption of responsibility in respect of that risk. This alleged that the risk of liquefaction was both foreseeable and could be detected prior to the collapse. It was said that it was apparent by August 2014, at the latest, that the dam was showing serious signs of distress, and the continued raising of the height of the dam should have stopped until it was made safe.
90. The secondary case was that although Article 186 of the Civil Code required the claimants to establish a specific legal duty to act, that was satisfied by BHP's failure to protect the environment under Article 225 of the Constitution and/or BHP's breach of duty to members of the community in which Samarco operated under Article 116 of the Corporate Law.
91. Finally and in the yet further alternative (to what was already an alternative case), the tertiary case was that if fault-based liability were not established under Article 186 of the Civil Code, Articles 116 and 117 of the Corporate Law imposed liability upon controlling shareholders such as BHP who acted in breach of the duty to respect and heed the rights and interests of the community, including by abusive exercise of their controlling power.
92. BHP's case on each of these three prongs of attack was that BHP had not caused the collapse by any culpable voluntary act or omission within the meaning of Article 186 of the Civil Code. BHP submitted that the claimants were attempting to make BHP liable in respect of Samarco's operations. The requirements of Article 186 were said not to be satisfied because: (a) BHP did not commit an unlawful act, or an unlawful omission in breach of a specific legal duty to act; (b) BHP did not breach any standard of care or duty; and (c) in any event there was no necessary causal link between the alleged acts or omissions and the collapse itself. BHP denied that there was any fault. It was submitted that the trigger for the liquefaction was not widely recognised, and there was no recognised process to test for that trigger. Therefore, failure by the mechanism that occurred, liquefaction flowslide, was unforeseeable. I would only add that the trigger was lateral extrusion. This is one part of the geotechnical case which I have not yet touched upon, but the precise nature of the trigger for the purposes of this application is not directly relevant; however, for any interested reader it is dealt with in the main judgment at [55] in summary terms.
93. BHP argued in response to the secondary case that that Article 225 of the Constitution and Article 116 of the Corporate Law did not give rise to specific legal duties that could be read across to Article 186 of the Civil Code, so as to satisfy the requirement for breach of a specific legal duty in respect of omission cases. In response to the tertiary

case, BHP contended that Articles 116 and 117 of the Corporate Law gave rise only to duties on the part of a controlled company itself, actionable by the company (or its shareholders through a derivative action); it was denied that they created freestanding rights of claim to third parties, such as the community itself. It was denied that Article 116 gave rise to any duty on the part of a controlling shareholder to ensure that its activities were conducted in a way which minimised the risk of damage to the community. BHP also denied that any of the matters relied upon fell within the scope of abuse of controlling power provided for in Article 117.

94. So far as trigger is concerned, the Panel (to which I have already referred above) had concluded that the flowslide required three conditions to develop: (1) saturation of the sand; (2) loose uncompacted sand; and (3) a trigger mechanism. The growth in the saturated conditions – the increase in saturation being a drainage issue – led to the first condition being satisfied. Depositing sand tailings by hydraulic means had resulted in loose uncompacted sand, which is the second condition. Hence, two of those conditions for liquefaction to develop resulting in a flowslide were present, and required the third condition, the trigger, for that to occur. The Panel considered the express question "Why did the flowslide occur when it occurred?" A trigger mechanism is what initiates the process that mobilises undrained shearing and hence flowsliding. Following an evaluation of potential trigger mechanisms, the Panel concluded that lateral extrusion is what had initiated the failure. The lateral extrusion mechanism developed as the dam increased in height, loading the slimes-rich zone vertically which tended to extrude or spread laterally, which the trial judge described as "rather like squeezing toothpaste from a tube". This resulted in stress changes in the overlying sands which reduced their confinement, leading to the collapse of the dam.
95. This mechanism for collapse was modelled by the Panel (using both laboratory tests and computational modelling) and this predicted that collapse should have occurred about the time that the dam was raised to the height that was attained on 5 November 2015. Obviously "prediction" is an inapposite term as this modelling was performed after the collapse had occurred. There had been earthquake activity just prior to the collapse which was also investigated by the Panel. Given the proximity of the dam to collapse due to prior construction loading, the Panel concluded that this was likely to have accelerated the failure process but that the failure of the dam was already well-advanced.
96. Again, the basis of the application is that the decisions of the trial judge were unjust due to a serious procedural irregularity, that being a failure by the judge to engage with the issues advanced by BHP in its defence to this part of the case. There are four under Ground 2.1, (a) to (d), and three under Ground 2.2, (a) to (c).
97. The four at (a) to (d) under Ground 2.1 are as follows:
 - (a) the judge failed to analyse contemporaneous documents received by BHP;
 - (b) there was no evidence BHP had seen or received certain technical documents relied upon by the judge;
 - (c) the judge failed to engage with pleading objections raised by BHP regarding the alleged negligent conduct of audits (which I shall call "the audit pleading objections"); and
 - (d) the judge failed to engage with BHP's case as to why the alleged negligent conduct of audits should be rejected.

98. It is said that the judge relied upon documents that were never shown to BHP at the time. The very short answer to that point is that just because the document itself was not provided, does not mean that the contents or subject matter of those documents was not brought to the attention of BHP by means of discussions with the BHP personnel, whether witnesses or not, and is not in any event determinative of what knowledge BHP in fact had at the time. These are matters of fact in relation to which the judge was ideally placed to come to a conclusion. Selecting documents here and there on an application such as this one is “island-hopping”. This part of the application for permission to appeal was verging on a full re-run of closing submissions made by BHP at the trial.
99. There is no basis for any suggestion that the judge failed to engage with BHP’s case. The two experts on this subject were Professor Rosenvald and Professor Tepedino who prepared a joint statement dated 15 April 2024 on the material Brazilian law expert issues of fault-based civil liability.
100. She explained in her judgment at [545] the issues that remained between these experts following their experts’ agreement, and went on to deal with those issues at [546] onwards, including at [563] that she preferred the opinion of Professor Rosenvald, who was the claimants’ expert, on civil liability for omission. It is more complicated than this, and this is recognised by the judge, but I would add the following as an observation in passing. Given Brazil is a Civil Code country, and the civil code itself generally has a principle widely known to jurists of not causing harm – one of the three core precepts of the Justinian Code itself (also for interest, a principle not entirely on all fours with the approach of the common law in this respect) her conclusion is not entirely surprising.
101. She preferred the opinion of Professor Tepedino on the second, alternative limb of the claimants’ case on fault-based liability and the scope of Article 225 of the Constitution; this point appears to have arisen out of an error in Professor Rosenvald’s written report conflating it with Article 186 of the Civil Code rather than Article 927. She dismissed the claimants’ argument that Article 116 of the Corporate Law imposed a legal duty on a controlling shareholder, breach of which could constitute an actionable omission under the terms of Article 186 of the Civil Code. She stated that this “does not stand up to scrutiny”. She therefore accepted the evidence of Professor Tepedino on this point.
102. She recited that Professor Rosenvald and Professor Tepedino agreed that there must be a cause and effect link between the relevant act or omission and the damage itself for there to be liability under Article 186 of the Civil Code. This means that there would be no liability on the part of BHP if there were a break in the chain of causation, and she gave examples of these as force majeure, what she called the “exclusive act of the claimant”, or an act by a third party. The legislative framework for this causal link is Article 403 of the Civil Code, and she considered “the several theories” as to application at [587]. This led on, in the main judgment, to her consideration of BHP’s assertion that there could never be a causal link between the conduct of a controlling shareholder and the activities of a controlled company, which as she explained, was unsupported by any authority or reasoned argument. However, the claimants accepted that the fault-based claims made against BHP must be grounded in acts and omissions that could be attributed to BHP, rather than the conduct of Samarco, and this is clearly set out at [599].

103. She then moved on to consider the Corporate Law and the opinions of Professor Muller Prado and Professor Trindade and preferred the evidence of Professor Trindade, BHP's expert on corporate law, at [626] and also at [634].
104. It is difficult to square this careful and detailed analysis, which on some issues preferred both the case of BHP and the opinion of BHP's experts in Brazilian law called on its behalf, and the judge's findings generally, with an assertion that the judge failed to engage with BHP's case on fault-based liability. The piecemeal objections by BHP to her findings, namely that certain documents were not provided to BHP at the time, or were "not analysed" by the judge – which must mean they are not specifically referred to in the judgment – is a vast distance away from what would be required to justify a claim of serious procedural irregularity.
105. She certainly did not prefer their case to that of the claimants; indeed she rejected BHP's case. However, with the exception of (c), the audit pleading objections, these are all issues of fact, including the audit negligence case, and the test for the appellate court is well known. I shall not repeat it further. The findings by the judge on these points of appeal were reached after considering BHP's case, and were not reached after serious or any procedural irregularity. These points are not reasonably arguable. I shall deal with the audit pleading objections together with similar pleading objections under Ground 2.2 under the heading "Pleading Objections".
106. Ground 2.2 is as follows. There are three separate strands to this ground, or sub-ground. BHP submit that:
 - (a) the judge "failed to engage with BHP's case as regards counterfactuals".
 - (b) the judge "failed properly to engage with BHP's pleading objections regarding alleged risk management negligence", which were to the effect that these allegations were not pleaded adequately or at all. I shall refer to this as the "risk management pleading objections".
 - (c) the judge "failed to engage with BHP's case as regards alleged risk management negligence", which was explained as meaning the merits of BHP's case.
107. The legal test for causation under Brazilian law required the claimants to establish that the collapse of the dam was the "direct and immediate" or "necessary" consequence of a negligent act or omission by BHP. Criticism is made of the finding of the judge that this test was satisfied. It is said that the trial judge failed to address BHP's case that the "necessary consequence" test was not satisfied "given the highly contingent nature of the counterfactual chains inevitably raised by [the claimants'] case". One therefore asks oneself, what was the "highly contingent nature of the counterfactual chains"?
108. I prefer to address this in the more sensible language of geotechnical issues, causation and foreseeability, as it appears that is what BHP means when it uses the phrase highly contingent nature of counterfactual chains.
109. The trial judge was required to consider and decide the causes of the collapse of the dam; and whether this was foreseeable. In blunt terms, simply because a catastrophic event has occurred, this does not always of itself mean that event could or ought to have been foreseen. That the judge realised this, and explained the way she was grouping these issues, is clear from [95] in the main judgment because she helpfully explained this in very clear terms:

“[95] This issue can be broken down conveniently into consideration of:

- i) the underlying geotechnical causes of the collapse;
- ii) whether a liquefaction study/stability analysis would have identified the risk of collapse;
- iii) what, if any, action could or should have been taken to avoid or mitigate the risk of collapse.”

110. Drainage is of crucial importance in geotechnical structures. This dam did not have a happy history, in the sense that the original design concept (which was what is called a drained stack) was departed from and the original foundation drain did not comply with the design. This was evidenced in 2009, when a report was commissioned by Samarco into what was called the Piping Incident. The main and secondary foundation drains were determined to be dysfunctional and were therefore sealed. They were replaced with what is called a blanket drain which was installed at a certain elevation; however the performance of the blanket drain was sub-optimal as a substitute for the drains it was supposed to replace. Due to its position it left undrained all material deposited below the elevation or level at which it had been installed. This had the effect of funnelling seepage flow from the full width of the dam into the blanket drain, which was narrower, raising the saturation level in the tailings themselves. Finally, as the impoundment became more distant from the blanket drain moving downstream, this also increased the volume of saturated tailings. This is all explained in far greater detail in the main judgment.
111. The trial judge undertook a detailed survey of the relevant geotechnical evidence between [96] and [170]. The two experts in this field were Professor Gens for the claimants, and Dr Marr for BHP. The respondents to this application submit that Dr Marr did not provide a stability analysis as part of his evidence. It is a matter for any party which evidence it adduces as part of its case, although the absence of a stability analysis by a geotechnical expert opining on these issues in this case is certainly surprising. BHP have not submitted that one *did* form part of Dr Marr’s evidence, but for present purposes whether he provided one or not does not matter. Such an analysis would have been an *ex post facto* exercise by him in any event. On the evidence that was before her, the judge concluded, having analysed how the risk of collapse could have been identified (including consideration of the phenomenon of flow liquefaction), and how the assessment of liquefaction risk would be considered by stability analysis between [188] and [219], that she preferred Professor Gens’ opinion on these issues in a number of instances and explained why.
112. Static liquefaction had been identified as the cause of a number of collapses of tailings dams around the world, such as the Stava Tailing Dam in Italy in 1985; the Sullivan Mine Tailings Dam in Canada in 1991; the Merriespruit Mine Tailings Dam in South Africa in 1994; and the Aznalcóllar Tailings Dam in Spain in 1998. All of these were detailed in Professor Gens’ supplemental evidence and are explained in [179] of the main judgment.
113. The trial judge concluded on the basis of the expert evidence that she accepted that “the dam’s precariousness and the high risk of liquefaction failure could have been

predicted”. She also concluded that “[a] stability review using the information available at the time would have identified, at least in September 2014, if not earlier, that the dam was at serious risk of collapse due to liquefaction ... [and] that the Factor of Safety of the dam was insufficient” (emphasis added). Factors of Safety, and the range that these ought to have been, are earlier explained by her at [196] and following. Without descending to enormous geotechnical or engineering detail, a factor of safety of 1.0 means that the competing forces are in equilibrium, but are in what is essentially unstable equilibrium. In lay terms, a factor of safety of 1.0 is not very safe at all. The minimum factor of safety necessary in any engineering scenario would be greater than 1.0.

114. In terms of foreseeability, there had been a slope failure at the dam in August 2014, over a year before the catastrophic collapse in November 2015. Dr Marr accepted in his evidence that this was a warning that should have prompted a stability analysis. I would venture that this sensible answer by Dr Marr in his cross-examination (reproduced at [223]) is the type of point which any sensible geotechnical engineer would accept. A slope failure at a tailings dam is not a welcome event. As a general observation, even without specialist knowledge, most sensible people who are not qualified geotechnical engineers - but who have some common sense - would also accept that such a failure was a warning, too.
115. In all these circumstances, one then turns to the fact that Samarco was raising the height of the dam *without* conducting any stability analysis. Dr Marr – again sensibly, in my judgment – accepted that was unwise. Unwise is my term; the judge used “imprudent”.
116. The judge explained this as follows:

“[224]....Dr Marr agreed that it was imprudent to continue to raise the dam along the alignment of the Setback in the absence of proper written analysis of the stability of the Setback and the attendant risks.

[226] A stability analysis, carried out using undrained shear strength parameters, would have identified Factors of Safety below FOS 1.5. It is inconceivable that a decision would have been taken to continue raising the height of the dam in those circumstances.

[227] It is important to recognise that the collapse of the dam occurred in the absence of any supervening destructive events, "Act of God" or force majeure. There was no catastrophic storm, earthquake or flood that could explain the disaster.

[228] BHP's case is that the collapse was sudden and unexpected; it was not foreseeable and could not have been prevented. That alarming proposition suggests that any of the thousands of tailings dams throughout the world could be at risk of imminent failure, without warning, causing widespread devastation and the risk of injury or loss of life. It would follow that all tailings dams were inherently dangerous.

[229] It is perhaps comforting that that is not the case. Upstream tailings dams are not inherently dangerous.” (emphasis added)

117. The case advanced by the claimants did not involve any highly contingent nature of counterfactual chains. What it involved was detailed geotechnical expert evidence by Professor Gens, accepted by the judge in preference to that of Dr Marr, together with the sensible evidence by Dr Marr concerning the August 2014 event which was a warning, and what ought to have been done. The judge also considered the history of the dam, its design, the amendment of that design, how that had affected the drainage, what had happened (including the August 2014 warning event), what that meant in geotechnical (and I would add also commonsense) terms, and what had occurred and what had not. In stark terms, the height of the dam continued to be raised, and the 2014 slope failure alone ought to have led to a stability analysis being performed.
118. In seeking permission to appeal on this ground, BHP maintains that the judge did not address a number of points made by BHP. It is said that the trial judge made a finding that causation was established without any consideration of how the test under Brazilian law could be satisfied by the complex counterfactuals on which the claimants’ case depended. BHP’s skeleton argument also states that “in order for liability to arise, (a) it was necessary to establish that an act or omission of the defendant in fact caused the damage and (b) that *Vicuña*, the leading STJ decision on [the Environmental Law], established that A403 (which provides for the test of ‘necessary’ causation) was the applicable test. The Judge should therefore have considered whether the Collapse was a necessary consequence of any act or omission by BHP.” If one reads the judgment as a whole, but in particular her analysis of the causes of failure, the history of the dam, and her analysis of the evidence of the geotechnical experts including what Dr Marr accepted in his cross-examination, that is exactly what the judge did.
119. Further, it is a misdescription to label the claimants’ case as depending upon complex counterfactuals. I doubt that many people, if anyone, with any passing knowledge of geotechnical issues would see this as complex, given the history of the dam and the geotechnical evidence. It is not a complex counterfactual to conclude that if the dam were in the unstable state that it was, and the height of the dam continued to be raised, without having conducted any stability analysis, causation was established. BHP’s involvement and responsibility for that was considered in detail. The judge’s conclusions are entirely rational and I do not accept there was any procedural irregularity.

Pleading objections

120. I turn now to the pleading objections which are part of Ground 2. These are the audit pleading objections, and the risk management pleading objections. BHP maintains that neither of these two parts of the claimants’ case were pleaded, and that the trial judge failed to engage with these pleading objections.
121. I start this part of these reasons by explaining the function of the agreed list of issues in a complex trial such as this. It is both the practice and procedure of the Technology and Construction Court, as well as the Commercial Court – both specialist courts within the Business and Property Courts – to require an agreed list of issues, generally no later than the Pre-Trial Review stage of any large case. This is dealt with both in the TCC Guide, and also the Commercial Court Guide. It is routinely done in all cases, large and

small, but is absolutely essential in a case of the scale such as this one. Sometimes, the list of issues cannot be agreed by the parties, and the trial judge at the Pre-Trial Review will be required to consider and sometimes rule on differences between them. By the time the trial starts, there will be a list of issues.

122. Here, the Final List of Issues for the Stage 1 trial which was updated on 23 September 2024 runs to some 70 different issues. There was also a list of issues for geotechnical issues which has 21 issues within it, and a separate list for licensing issues. These lists of issues define what the parties are arguing about at trial, and what the trial judge is to resolve. They are important documents. By the Pre-Trial Review stage of any case, the factual and expert evidence will have been served. The list of issues effectively replaces the pleadings, which become foundation documents which have essentially been overtaken by events. They are far more important than the pleadings by the stage of the trial. In this case, there was a Re-Re-Re-Amended Master Particulars of Claim (this is 172 pages long); a Re-Re-Re-Re-Amended Defence (263 pages); a Re-Re-Re-Amended Reply (111 pages or 118 if one includes the Reply (Appendix A)); and even a Re-Re-Amended Rejoinder (118 pages). It can be seen, based on the length and complexity of those documents, why an agreed list of issues is so important.
123. Here, the list of issues agreed by the parties and then addressed by the judge has the rubric at the beginning: “This list of issues has been agreed without prejudice to: (i) the detail of the parties’ positions, as set out in the parties’ statements of case; and (ii) the order in which the issues are to be considered and/or determined at the stage 1 trial.” I certainly do not interpret those words as diluting the importance of the list of issues. As a general observation, no party should store up pleading points, and trial judges generally – particularly if all evidence dealing with such points has been heard and tested – are generally reluctant to decide cases on technical pleading points.
124. BHP took 11 separate pleading points in closing, such that the claimants lodged a table entitled “Basis in the Pleadings for Cs’ Standard and Particulars of Fault” (“the claimants’ pleading table”). That document addressed where in the pleadings, which were cross-referenced within to other parts of the claimants’ case, the relevant allegations to which objection was being taken were in fact pleaded. It also made the point that “In any event, Ds have not identified any prejudice as a consequence of any alleged defects in the pleadings” and demonstrated that the points complained of by BHP had in any event been covered in evidence by some of its witnesses. The lack of any prejudice is effectively a total answer in any event to these two pleading points. However, even if it were not, the suggestion that in closing submissions any party in a case such as this one could produce pleading objections, when evidence on a particular issue had been advanced and tested, is a fanciful one. This approach to pleading objections by BHP has echoes of a bygone age and is not the way that modern commercial litigation is conducted in the Business and Property Courts.
125. The claimants’ pleading table has the 2013 audit dealt with at entry 6; risk assessments dealt with at entry 7, and the 2015 Samarco and Iron Ore Brazil audits dealt with at entry 11. Those references to the pleadings make it clear that it certainly cannot be said to be wrong for the trial judge, having heard the evidence and considered the closing submissions, to have concluded that the pleading objections were not valid ones. Yet further and in any event, the judge does deal with the pleading objections by stating in the judgment:

“[654] Legitimate concerns have been raised by BHP regarding the evolving and changing nature of the illicit acts relied on by the Claimants. The material allegations, considered below, have been pleaded but it must be said that at times the path through the pleadings to find them is somewhat tortuous.”

126. She therefore considered the pleading objections and concluded that the points were pleaded. That ought to be the end of the matter. I do agree with her the path is tortuous, and in the enormous number of paragraphs of pleading, these do take some tracking through. The person best placed to have plotted that tortuous path is the trial judge. In the light of that paragraph of the judgment, there is nothing in these pleading objections, and absolutely nothing to justify any claim that the judge “failed to engage” with the objections. The real objection by BHP is that the two pleading points were not upheld; alternatively, that the reasons for dismissing them were not more fully explained by the trial judge. However, that latter approach is not permissible as it seeks to impose a counsel of perfection upon the trial judge. As it was, the judgment took many months to write, which is not surprising and entirely understandable given the scale of the case. To require a detailed analysis of each and every point raised by a party in any case, but particularly in a case such as this one, would be almost asking the impossible. It would also be contrary to the overriding objective.
127. Generally and in conclusion on this ground, I do not consider the allegations that the judge failed to engage with BHP’s case to be a valid submission. Regardless of the fact that, having summarised BHP’s case as she did, it would be fundamentally unlikely that in a judgment such as this one that case would not be “engaged with”, it can be seen on analysis that BHP relies upon a failure to refer specifically to different points of their argument to found this submission (or repeated submission) generally. As I have explained above at [36], this is contrary to cases such as *Volpi*. This court should assume, contrary to the approach that underpins BHP’s case on this appeal, that the trial judge has taken all the evidence and arguments before her into consideration, unless there is some compelling reason otherwise. Here, there is no compelling reason to justify not making that assumption, and a wide number of indicators that demonstrate that in any event the trial judge did so.
128. It ought also to be remembered that the whole of the fault-based liability case was an alternative case in any event. The reasons given for preferring an alternative case are, by definition, less important and will usually be more summary than the reasons for concluding that the primary case succeeds. It is important that they are addressed, but they do not need to be addressed in the same detail as a primary case, for obvious reasons.
129. I do not accept that any of the grounds relating to BHP’s liability for the dam collapse are reasonably arguable. I do not consider that there is any foundation for the different complaints that the trial judge failed to engage with BHP’s case. There is no doubt that the trial judge did not accept BHP’s case, and she – entirely understandably – did not recite every single piece of evidence before her, but that is a world away from “failing to engage” with BHP’s case. All her conclusions were rationally available to her, and she was entitled to make the findings that she did.
130. In particular, the submission that the expert for the claimants “agreed” certain central points of expert evidence, or made concessions in his cross-examination, is not

remotely accurate. This submission was made to the judge, and was met by the claimants submitting a comprehensive schedule of evidence, set out in tabulated form, that makes clear the context of the answers given by the expert, which are quoted far more extensively and show that there was no such agreement. I consider this particular strand of the way that BHP seeks to advance its appeal as particularly regrettable. It also requires a strained meaning to be given to the simple word “concession” that robs it of its usual everyday meaning.

Limitation

131. I can deal with limitation shortly, as the principles applicable to appellate review for findings of foreign law have been addressed extensively above. Evidently, limitation is also a matter of Brazilian law, issues under that foreign law being treated as issues of fact. The main findings on limitation by the trial judge were that limitation did not start to run until 2024; and that the period that applied as the relevant limitation period was five years, rather than the more usual three years.
132. The legal approach to appeals and issues of foreign law that are considered and resolved in the courts of this jurisdiction has already been explained above in addressing *Perry v Lopag* [2023] UKPC 16.
133. Ground 3 is that the findings that the limitation period was suspended pursuant to Article 200 of the Civil Code is wrong and/or unjust because of a serious procedural irregularity because the judge (a) failed to engage with the two determinative issues; and that the judge (b) erred in foreign law/fact in relation to the findings on those issues.
134. Ground 4 is that the finding that the claimants’ claims were subject to a five-year limitation period pursuant to Article 27 of the Consumer Defence Code is wrong and/or unjust because of a serious procedural irregularity because the judge (a) failed to engage with the single determinative issue; and that the judge (b) erred in foreign law/fact in relation to that issue.
135. Ground 5 is that the finding that the claims by Municipalities and other public entities were subject to a five-year limitation period pursuant to the 1932 Decree is wrong and/or unjust because of serious procedural irregularity because the judge (a) failed to engage with the determinative issue; and (b) that the judge erred in foreign law/fact in relation to the finding on that issue in concluding that the 1932 Decree applied to those claims by the claimants that are public entities.
136. There was no procedural irregularity, serious or otherwise, and the claims that the judge “failed to engage” on these three areas of the Brazilian law of limitation are groundless. She clearly addressed these issues in her judgment, and indeed these issues are not only in the agreed list of issues but are listed in her judgment.
137. The baseless submission by BHP that she did not engage with or properly address their case can most starkly be considered in relation to Ground 5 and the 1932 Decree. The judge expressly stated at [939] that “BHP’s case is that the 1932 Decree only applies (by analogy) to public or administrative claims by the state and has no application to the claims advanced in these proceedings”. After considering this in the judgment she concluded at [943] and [944] that she preferred the evidence on the cases of Professor Rosenvald. BHP state that the judge’s findings are contained in one paragraph and one

sentence for Article 200, one paragraph for the Consumer Defence Code, and one sentence for the 1932 Decree, and that this shows “how badly things have gone wrong”.

138. I disagree that the length of the determination on the face of the judgment is a sign of serious procedural irregularity or demonstrates that things “have gone wrong”. The consideration of limitation generally is more detailed than BHP suggests, particularly when one takes into account her analysis of the evidence of the two experts on this subject. There can be no basis for criticising the length of the reasoning, given the scale of the case generally and the judgment when viewed as a whole, and concluding that she had failed to engage with the case. There is nothing to suggest any serious procedural irregularity. There is no doubt that the judgment could have been far longer than it was, either on the limitation issues or otherwise, but the basic blocks were there for BHP to know why their expert evidence on this was not, in overall terms, preferred and why the judge had concluded as she did.
139. I turn therefore, finally, to consider the submissions in respect of each of these three grounds of appeal on limitation that the trial judge erred in foreign law/fact on each of her findings. These are, finally on this application, at least discrete points arising from the judge’s reasoning and therefore more conventional in terms of appeal points than the “failure to engage” approach that has coloured the majority of this application by BHP.
140. The findings on these points also directly impact a very large number of claimants. They are described as novel findings by BHP in its skeleton argument, as criminal investigations in Brazil that were ongoing do, as a result of the judge’s findings, postpone the date at which limitation starts to run (under Ground 3) and there is a longer period of five years rather than the more usual three years. It is also said that there is litigation elsewhere in the world arising out of the same event (such as in the Netherlands), that litigants in England are already seeking to rely upon the judgment, and that litigants in Brazil are too. The judge’s findings on Article 200 are said to be relied upon in 60 different appeals in Brazil.
141. I do not agree that such submissions justify a compelling reason for granting permission to appeal on these matters of the Brazilian law of limitation. I cannot see that her findings either bind, or are in any way relevant, to the courts in Brazil determining their own law, given it is a Civil Code jurisdiction. However, even if it were not, I know of no element of the doctrine of stare decisis which (even if it were to apply) would give the first-instance decisions of a court of another jurisdiction on domestic law binding status at all. The TCC in London cannot possibly bind the superior courts in Brazil. These findings on limitation by this trial judge on these issues in this jurisdiction are binding solely on the parties before her, they are only persuasive, and not binding, on other first-instance proceedings in England anyway. I return to the approach of this court when considering foreign law issues set out in *Perry v Lopag* [2023] UKPC 16. No appellate court can replicate the exercise that has been undertaken before the trial judge. There is insufficient to justify a finding that she is wrong, even on a reasonably arguable basis, or that there is any other compelling reason to grant permission to appeal. I would refuse permission on each of the three limitation grounds too.
142. In none of the grounds which BHP seeks to advance could it possibly be said that the decision under appeal is one that no reasonable judge could have reached, or one that was not properly open to her. Further, there are no free-standing points of principle that

the judge got even arguably wrong. There was no failure to engage and no serious procedural irregularities. Instead, she applied her findings on foreign law – which are treated as findings of fact in this jurisdiction - to the facts as she found them to be, reached after a very long trial and having heard a considerable number of witnesses, particularly expert witnesses, over a very large number of hearing days. There are no other compelling grounds to justify any grant of permission to appeal, particularly on limitation.

143. Accordingly, I would refuse permission on each element of Ground 1, strict liability; refuse permission on each element of Ground 2, fault-based liability; and also refuse permission on each of the three Grounds dealing with limitation. I turn therefore to the next aspect of the application, namely expedition.

Application for expedition

144. A further significant trial is planned for 2027, called the Stage 2 trial. There are a range of further complex issues to be decided, including but not only those of quantum. The application for permission to appeal also sought, were permission to be granted on any of the grounds, expedition of the appeal in order to save the potentially redundant expenditure of costs by the parties in preparing for Stage 2, were the appeal to succeed. BHP has permission to appeal on one ground relating to costs already, as permission for that was granted by the trial judge. Given I would refuse the grant of permission on all of the substantive grounds 1 to 5, the question of saving costs on work for the next trial that might be abortive is otiose.
145. It is unclear to me the degree to which expedition is pursued if, as I have found, the appeal is to proceed solely on the costs ground. However, that single ground is a self-contained point of principle concerning an order that BHP pay interest on pre-judgment costs on account of a potential liability to pay a success fee, which reflects the costs of funding the litigation. As is relatively usual in cases such as this, the litigation is being funded by specialist litigation funders. The trial judge ordered interest to be paid at 1% over base rate at [52] of her consequentials judgment.
146. In a case such as this, it would obviously be helpful to both parties to know the definitive answer to that point sooner rather than later. Of course that applies to most, if not all, litigants when matters go on appeal. However, here, the level of costs overall is very sizeable; at [27] of the consequentials judgment the claimants' costs are recited as £189 million at that stage. That sum is arrived at having reduced £24 million for the jurisdictional costs. Therefore the claimants' gross costs total, in broad terms only and as at January 2026, was in excess of £213 million. Interest could be a sizeable figure in its own right. If resolving that one point proceeding on appeal could assist the parties, or even bring the litigation to an end (which may be an excessively optimistic view, but might be correct) then it can only help these litigants to know the answer. It would also assist litigants in other cases, but who are in the pipeline working towards a trial. Trial judges are a scarce resource. It would therefore, in my view and in the unusual circumstances of this case, be consistent with application of the overriding objective to grant expedition on the sole ground of appeal that is to proceed. I would therefore order expedition of the appeal, which I understand from internal inquiries with the Court of Appeal office could take place in October.

LORD JUSTICE LEWISON

147. I agree.