IN THE HIGH COURT OF SOUTH AFRICA
(GAUTENG DIVISION, JOHANNESBURG)

Case number: 2020/32777

In the matter between:

VARIOUS PARTIES ON BEHALF OF MINORS	First to twelfth applicants
[redacted]	Thirteenth applicant

and

ANGLO AMERICAN SOUTH AFRICA LIMITED	Respondent

and

AMNESTY INTERNATIONAL	First *amicus curiae*
THE SOUTHERN AFRICAN LITIGATION CENTRE	Second *amicus curiae*

RESPONDENT'S HEADS OF ARGUMENT IN THE CERTIFICATION APPLICATION

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INTRODUCTION

The essential facts giving rise to this certification application

1. Zambia Consolidated Copper Mines Limited ("ZCCM"), and its predecessors in title, at all times from 1905 to 1994 owned and operated a zinc and lead mine in Kabwe, Zambia. It is a Zambian state-owned entity. It is currently listed on the Lusaka and London Stock Exchanges and Euronext with a market capitalisation of almost R5 billion. It was obliged, and remains obliged, both by assumption of liability and by statute, to remediate the Mine[1] and the area surrounding it.

2. By all accounts, the area immediately surrounding the Mine – including three residential areas, Kasanda, Chowa and Makululu – is polluted by lead. A source, although not the only source, of the lead is the Mine. The applicants identify dust and fumes emanating from smelting activities on the premises as the source of the lead pollution. The nature of the smelting activities and the associated quality of pollution controls changed drastically over the life of the Mine.

3. It is common cause that smelting activities in the period up to 1925 was heavily pollutive, given that ZCCM[2] employed no pollution controls whatsoever. 12% of the total lead produced at the Kabwe Mine was produced in that period.

4. Anglo invested in the Mine in 1925. In general – and throughout the relevant period ending in 1974 – Anglo held a minority interest in the Mine of ±10% through an intermediate entity. At times during the relevant period, Anglo was

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[1] Unless otherwise indicated, we adopt the definitions in the Applicants' HoA pp 007-5 to 007-6.

[2] Then known as Rhodesia Broken Hill Development Company ("RBHDC").

also a technical adviser of the Mine; and at other times, some of its corporate associates likewise advised the Mine. But, at all relevant times ZCCM employed its own Mine Manager who was responsible for the mining operations.

5. In 1971, the Zambian government nationalised the Mine. In 1974, the Zambian government terminated all technical and advisory appointments held by corporate associates of Anglo. The period 1925 to 1974, ending 48 years ago, is thus the only period in respect of which the applicants are seeking to hold Anglo liable for historical lead pollution.

6. In its own words, ZCCM ran down the Imperial Smelter Furnace ("ISF") and associated pollution controls – which were state of the art for their time – from 1975 until the Mine's closure in 1994, due to a lack of technical skills and maintenance and a desire to conserve scarce foreign exchange reserves.

7. All measures of lead pollution in the surrounding communities sky-rocketed from the levels recorded in 1974, being the end of the relevant period. This worsened in 1985, when (again in ZCCM's own words) the ISF's pollution controls became non-operational. It worsened further when, in 1989, the pollution controls collapsed and were removed, without being replaced.

8. In ZCCM's own words, the period following the collapse "*most likely represents the worst period of lead pollution, in the history of the Kabwe Mine*".[3] Thus, in 1989, ZCCM resolved to settle out of court any legal cases brought against it, because – again, its own words – it was "*culpable from [an operations] point of*

[3] AA para 253 pp 001-2760 to 001-2761 quoting a ZCCM memo, dated 28 August 1996, under the heading "*lead in blood – historical comparison*".

view".[4] ZCCM recorded, at the same time, its knowledge that the problem would persist even if the plant were closed, for 20-30 years hence.

9. The Mine closed in 1994. In 1995, ZCCM committed to a promising remediation plan, with considerable outside assistance. ZCCM nevertheless, and despite the knowledge of its culpability and the long-term persistence of the problem if not addressed, did not implement its plan. Instead, it decided rather to sell off the Mine and surrounding land to private investors; and to sell its housing stock of more than 2000 contaminated houses to the community. It knew there was lead contamination. It knew it had to demolish these houses and replace the soil but decided, for political expediency, not to do so.

10. In the 2000s, the World Bank and the Zambian government attempted to assist ZCCM on various occasions to remediate the Mine's surrounds. These efforts are ongoing but, to date, they were largely unsuccessful, due to a lack of historical political commitment. The community still has free access to uncovered mine dumps, which convey their contaminated dust daily on the surrounding houses. Artisanal mining by thousands of people is permitted to continue. Smelting by third parties continues unabated. The Kabwe Canal continues to convey lead-polluted debris to Chowa, because ZCCM backfilled a sedimentation pond with dire consequences.

11. Yet, despite ZCCM's crystal-clear culpability, admitted liability and willingness to settle claims, the applicants choose not to look to it for compensation. In **section one** we flesh out the relevant background facts, which are either common cause

[4] AA para 241 p 001-2757 quoting minutes of ZCCM's environmental task force dated 7 April 1989.

or cannot be disputed, from the beginning of the 1900s to the present.

The unmeritorious case against Anglo should not be allowed to proceed

12. Instead of suing the culprit, which had indicated that it would settle cases, the applicants and their funders decided to look to Anglo, whose involvement with the Mine ended 48 years ago. They attempt to formulate a *prima facie* case against Anglo, despite obvious flaws.

<u>The court's duty to weed out unmeritorious cases</u>

13. The bulk of these heads of argument is devoted to showing the artifice used to construct an untenable case against Anglo – against the overwhelming, common cause and easily available evidence of ZCCM's obvious culpability. This matters, because the applicants are required to obtain this Court's judicial *imprimatur* to proceed with a class action. Unlike an ordinary action, Courts are duty-bound to screen class actions to ensure that it is in the interests of justice for them to proceed.[5]

14. The reason for the certification requirement is that, unlike ordinary actions, class actions have the potential to overwhelm the administration of justice and to exhaust the resources of both plaintiffs and defendants. Because a class action permits the aggregation of claims, even if a claimant has a weak claim, the sheer number of class members and the potential pay-out might force the defendant to

[5] See Du Plessis M "Class action litigation in South Africa" in Du Plessis M, Oxenham J, Goodman I, Kelly L & Pudifin-Jones S (eds) (2017) p 12: "Accordingly, it is essential that courts properly exercise their discretion to screen out unworthy cases."

settle a meritless claim in order to avoid an existential threat.[6]

15. Thus, a class action may – and often does – serve to coerce defendants. Without effective legal safeguards, class actions may be used as a weapon *in terrorem* by encouraging claimants to file massive lawsuits that have minimal chances of success in order to extract settlements from defendants.[7]

16. Class actions may also impose significant burdens on the Courts. In this case, one cannot even start to contemplate the unimaginable task of a Court to decide, in respect of each of 140 000 prospective class members in an enormous district which has grown extensively since 1974, whether his or her maladies – including vaguely circumscribed behavioural deficiencies, such as delinquency and criminality – were caused by lead, or by environmental factors, nutrition, genetics etc.

17. For all these reasons, the Constitutional Court recognised in the leading case of *Mukkadam* that:

> "Permitting a class action in some cases may … be oppressive and as a result inconsistent with the interests of justice."[8]

18. The Supreme Court of Appeal ("SCA") has identified, as an important reason why certification is required, the fact that it enables the defendant to show at an

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[6] See, for example, *Messner v. Northshore Univ. HealthSystem*, 669 F.3d 802 at 825 (7th Cir. 2012).

[7] See *In re Modafinil Antitrust Litig.*, 837 F.3d 238 (3d Cir. 2016) at 249 explaining that class certification may "create unwarranted pressure to settle nonmeritorious claims on the part of defendants". See also Robert G. Bone & David S. Evans, *Class Certification and the Substantive Merits*, 51 Duke L.J. 1251, 1292 (2002): "Because plaintiffs file frivolous and weak cases to obtain a settlement, the greater prospect of settlement with successful certification should encourage plaintiffs to file more frivolous and weak class action suits."

[8] *Mukaddam v Pioneer Foods (Pty) Ltd and Others* 2013 (5) SA 89 (CC) para 38.

early stage why the action should not proceed. In the words of Wallis JA: "This is important in circumstances where the mere threat of lengthy and costly litigation may be used to induce a settlement even though the case lacks merit."[9]

19. Thus, Anglo has a right to show – even at this early stage – that the case against it is devoid of merit. If Anglo can show that the case against it is unmeritorious, then it is proper and necessary for a Court to dismiss the certification application, because it is not in the interests of justice to permit an unmeritorious case to proceed.

20. Unterhalter J identified the reason vividly in *De Bruyn*:

> "Why would a court trigger the machinery of a class of action to determine something that does not exist in law? To do so would be to place a ghost in the machinery of justice."[10]

21. Thus, a court is duty-bound at the certification stage to decide whether a class action raises a *prima facie* case. What it cannot do is to accept the applicants' invitation to postpone these matters for decision by a trial court. For instance, the applicants submit:

> "Anglo's attempt to shift the blame to ZCCM is self-evidently a matter for trial… This dispute involves complex questions of causation and historical evidence, which cannot be disposed of at certification stage."[11]

22. Whatever superficial attraction this statement may have in ordinary matters, it

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[9] *Trustees for the time being of Children's Resource Centre Trust v Pioneer Food (Pty) Ltd* 2013 (2) SA 213 (SCA) para 24.

[10] *De Bruyn v Steinhoff International Holdings NV and others* 2022 (1) SA 442 (GJ) para 300.

[11] Applicants' HoA para 39 p 007-22.

certainly does not apply in this case. The essential evidence on duty of care, breach of duty and causation will not change or improve for the applicants at trial; and the parties have laboured mightily to extract every possible shred of documentary and other evidence, including reams of expert evidence, and factual evidence obtained from searches of archives. That much is clear from the record, which runs to far more than 10,000 pages.

The evidence cannot get better for the applicants at trial

23. First, significant parts of the material facts put up by Anglo remain undisputed, or are indisputable. For example, the facts pertaining to the operation of the Mine from 1974 until its closure in 1994, and the failed attempts at remediation which endure to the present day, were put forward by Anglo. The applicants had not dealt with this issue in their founding affidavits, and Anglo's factual material is not materially contested by countervailing factual material put up by the applicants in reply. The correct way to deal with that kind of factual material is set out by the SCA in *Children's Resource Centre*, where the Court said:

> "The test does not preclude the court from looking at the evidence on behalf of the person resisting certification, where that evidence is undisputed or indisputable or where it demonstrates that the factual allegations on behalf of the applicant are false or incapable of being established. That is not an invitation to weigh the probabilities at the certification stage. It is merely a recognition that the court should not shut its eyes to unchallenged evidence in deciding the certification application."[12] (Emphasis added.)

24. Thus, the applicants have not contested in any meaningful way the evidence of

[12] *Trustees for the time being of Children's Resource Centre Trust v Pioneer Food (Pty) Ltd* 2013 (2) SA 213 (SCA) para 41

ZCCM's recent and reckless conduct over decades, which is amply shown by documents. While the applicants avoided disclosing this conduct in their founding papers, they cannot (and do not) deny the essential facts that show ZCCM's culpability.

25. Conversely, those matters that can truly only be resolved at trial – because they depend on facts or opinion that are vigorously disputed or disputable between the parties – do not alter the essential lack of merits of the applicants' case. This matter may be resolved at the certification stage, without needing to decide all the vigorous disputes between the experts.

26. Emphatically, that does not mean that Anglo concedes the correctness of the applicants' version on disputed expert opinions; or even less that Anglo acquiesces in the scurrilous and wholly unfounded attacks on its experts' credibility. Anglo has responded fully to those attacks, launched in reply[13], in its application to strike out.[14] We submit that the applicants' case can be shown to be lacking in merit, without depending on the credibility of Anglo's experts.

27. Thus, the evidence on which the merits of the applicants' case turn, does not get better at trial.

28. Second, the applicants have not shown, in any meaningful way, that there are more documents or other evidence available than have been put up to date.

29. The applicants' lawyers have made considerable efforts to prepare this

[13] RA paras 337-382 pp 001-7714 to 001-7728.

[14] Anglo's FA in strike-out application paras 159-189 pp 006-70 to 006-82.

application over a 17-year timeframe. The founding affidavit shows that the claims were investigated in two periods and the applicant utilised resources in South Africa, Zambia, Australia and the United Kingdom for this purpose.[15] The first period ran from 2004 to 2007. The matter was picked up again in February 2018 and the applicants' lawyers did earnest work on the matter before they launched the application in October 2020.[16]

30. It is virtually impossible to locate relevant witnesses at an appropriately senior level still alive and with memories intact, when the shortest period in issue is 48 years ago, and the longest stretches back almost 100 years. Historical documents have therefore assumed a great deal of significance in this matter. The applicants explain in their founding affidavit:

> "The events addressed in this proposed class action span more than 100 years. As a result, the [applicants] have relied on archival material, reports, contemporaneous correspondence, theses, and documents prepared by authors who have since died or are otherwise untraceable."[17]

31. The applicants (and Anglo) have therefore had to rely on documents from archives – especially the ZCCM archive in Ndola, Zambia. For obvious reasons, ZCCM controls the records for the relevant period and thereafter, which are archived in a central repository.[18] In preparing their case, the applicants' lawyers have visited the ZCCM archive twice in person in 2018 and 2019 and have had

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[15] FA para 317.1 p 001 – 142.

[16] FA para 317.1 p 001 – 142.

[17] FA para 49 p 001 – 31.

[18] FA Extension application para 17 p 004 – 12.

a Zambian agent access the ZCCM archive again in 2020.[19]

32. The applicants have also enjoyed access to other archives and repositories around the world.[20] The founding affidavit shows that the applicants have also researched this matter in the National Archives, Kew (UK), the British Library, London (UK) as well as the Johannesburg Public Library. The result is that, following this exhaustive search, there is no chance that the evidence presented before this Court will change in any material way after certification.

33. Knowing this, the applicants are pinning their hopes on the existence of incriminating documents held in so-called "private archives" that may become available to them in pre-trial discovery.[21] The applicants have seemingly accepted that Anglo may not have the documents, as in their reply they note a concern about the "apparent lack of documents that Anglo has been able to locate in its own archives in South Africa and in private archives that hold records of its directors and senior leadership."[22]

34. The applicants have now mooted their desire to use the subpoena process to access the said "private archives". However, the applicants never make clear which private archives they intend to access. In fairness to Anglo, they were duty-bound to specify where those archives might be and why they believe that those archives would contain documents they would need to rescue their case. It is

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[19] Extension application AA para 55.3 p 004 – 400.

[20] FA para 5 p 001 – 1210.

[21] FA para 49 p 001 – 31. The applicants state that "much of this evidence is uniquely within Anglo's knowledge or will be confirmed by further documentation held in private archives. The pre-trial discovery process will no doubt bolster the existing documentation and will cast further light on Anglo's role." See also RA para 25.7 p 001 – 7601.

[22] RA para 499 p 001 – 7763.

pure speculation that any relevant documents remain in unspecified "private archives".

35. Thus, in the language of the SCA in *Children's Resource Trust*, this is an example of a case that is "factually hopeless" because:

> "…the evidence available and potentially available after discovery and other steps directed at procuring evidence will not sustain the cause of action on which the claim is based. In other words, if there is no *prima facie* case then it is factually hopeless."[23] (Emphases added.)

36. The evidence potentially available after discovery will not change. The applicants' case is factually hopeless.

37. Third, by their own admission, the applicants' case rests upon historical documents. The certification court is in as good a position as a trial court to read the historical documents; and to divine their meaning. Expert evidence on the meaning of the documents is inadmissible and hence oral evidence in a trial will not assist to clarify their meaning.[24]

38. It matters not that the culpability of ZCCM, and the lack of culpability of Anglo, is said to involve "complex questions of causation and historical evidence". In truth, the applicants' difficulties with, for example, causation are known and overwhelming, and can appropriately be decided now. The certification court is duty-bound to screen unmeritorious cases, and is in as good a position as the

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[23] *Trustees for the time being of Children's Resource Centre Trust v Pioneer Food (Pty) Ltd* 2013 (2) SA 213 (SCA) para 35.

[24] *KPMG Chartered Accountants (SA) v Securefin Ltd and Another* 2009 (4) SA 399 (SCA) para 40 and the authorities cited there.

trial court to assess the available evidence in this case.

It is contrary to the interests of justice to grant certification

39. Anglo obviously acts in its own interest in showing the flaws in the applicants' case. For doing so, it attracts stinging criticism from the applicants' lawyers in their heads of argument. It is accused of trying to frustrate the applicants' rights to access to justice by any means possible.

40. But in the final analysis, it is neither in the applicants' interests nor the public interest for a case of this magnitude and complexity to be litigated for a very long period and at a high cost – to all concerned – when it will come to nought.

41. Even in the ordinary course, class actions "have the potential for becoming monsters of complexity and cost".[25]

42. In the present case, however, the proposed class action significantly exceeds the ordinarily anticipated complexity and cost of a typical class action due to several of its truly extraordinary features. These include:

    42.1. The applicants seek to claim damages against Anglo based on its alleged involvement in the affairs of a Zambian mine between 1925 and 1974, thus starting and ending 97 and 48 years ago respectively.

    42.2. All of the proposed class representatives and the applicants' estimated

[25] *Tiemstra v Insurance Corp. of British Columbia*, 1997 CanLII 4094 (BC CA), para 13 citing Esson CJ in *Tiemstra v Insurance Corp of BC* (1996) 22 BCLR (3d) 49 (SC), para 20, as further referred to in *Trustees for the time being of Children's Resource Centre Trust v Pioneer Food (Pty) Ltd* 2013 (2) SA 213 (SCA) footnote 22.

140 000 class members reside in Kabwe, Zambia, in a district the size of Johannesburg.

42.3. The events giving rise to the proposed class action occurred in Zambia. The cause of action is governed by Zambian law.

42.4. Indeed, the case has almost nothing to do with South Africa. The only factor linking this case to South Africa is that Anglo resides here. No other aspect of this case has anything to do with South Africa.

42.5. Yet, the case would require a South African court not merely to apply Zambian law, but also develop Zambian law. This despite the fact that South African courts and counsel have no expertise in Zambian law.

42.6. All but one of the applicants' expert witnesses are not South African - most of the applicants' expert witnesses are American. The overwhelming majority of lay witnesses are likely to be Zambian and are likely not to speak English, but the local languages of Bemba and Nyanja.

42.7. Given that the impugned conduct took place up to almost a century ago, there is no person currently working at Anglo who can testify to all the material facts over the entirety of the relevant period.

42.8. Because the case is being heard in South Africa, Anglo will be unable to subpoena Zambian witnesses to testify; and a South African court has no jurisdiction over ZCCM – either for purposes of subpoena or to join it as a party.

42.9. All of the real evidence – soil samples, blood samples and so on – is in Zambia.

43. Given these considerations, it would require the clearest case for certification imaginable before a court would agree to certify this class action. But that is far from the position here. On the contrary, the applicants' case is untenable in a series of respects.

44. We deal with these respects below, including the difficulties raised by the remediation relief claimed; the applicants' insistence on an opt-out class action where the Court obviously cannot assume jurisdiction over those who failed to submit to its jurisdiction; the untenably large classes sought to be certified which bear no relation to the *prima facie* case sought to be advanced; and the unlawful funding mechanism sought to be utilised. All of these militate against the interests of justice.

45. But the heart of the matter, which tips the balance decisively against certification, is the lack of a *prima facie* case against Anglo. A court will not allow a class action to proceed, under the interests of justice standard, if the applicants have not shown a cause of action raising a triable issue. The reason is that:

> "It would allow a class action to go forward with its significant entailments of cost to the parties and burdens upon the court in circumstances where the certification court considered the cause of action <u>implausible but not unarguable</u>. …. [C]lass actions, as in this case, often involve complex litigation, of importance to many, with significant consequences of both expense and expectation. For this reason also, the interests of justice require that a certification court should not permit a class action to proceed

on the minimal premise that the cause of action is not hopeless. Too many risk too much to proceed on this basis."[26] (Emphases added.)

46. As we show below, and has become common cause, with every day that goes by, potential claims of members of the second (women) class against ZCCM are time-barred. Allowing time to go by, wasted on an implausible case against Anglo in South Africa, is not in the interests of the classes either. It is in class members' interest to pursue every possible legal remedy in Zambia as a matter of urgency.

47. The applicants are ably represented by resourceful and well-resourced lawyers in England and South Africa. These lawyers profess ample knowledge of local circumstances and resources in Kabwe that have enabled them to sign up 1058 clients by the time this application was launched.[27] They should pursue their true remedy in Zambia.

The case against Anglo is legally and factually flawed

48. We give a brief overview of the argument as a roadmap for the convenience of the Court.

Knowledge, duty of care and foreseeability

49. In **section two**, we demonstrate that the applicants have failed to establish that Anglo owed a duty of care to the proposed classes.

50. The applicants were all born after 2000 – most in the last ten years – and the

[26] *De Bruyn v Steinhoff International Holdings NV and others* 2022 (1) SA 442 (GJ) paras 296 & 297.
[27] FA p 001-131 para 295.

vast majority of class members too. The applicants do not point to a precedent where an alleged historical polluter was held liable in tort for negligence because it owed a duty of care to those yet unborn at the time it is said to have polluted. The limited legal precedents available indicate that finding such an intergenerational duty of care is untenable, because damage to later generations and decades into the future could not have been foreseen.

51. The applicants' own expert indicates that, based on available research, it was possible to expect only by 1974 (i.e. the end of the relevant period) that lead contamination would remain in the soil and be harmful to future generations "for 50 years and possibly longer".[28]

52. ZCCM's 1995 Decommissioning Plan for the Mine indicated that ZCCM have been aware of the potential for soil contamination only **since 1975**.[29]

53. The applicants' own expert also indicates that it was only in the mid- to late 1970s that the United States Environmental Protection Agency first issued standards for ambient airborne lead.[30]

54. This followed a recognition that lead from gasoline could be harmful – a realisation that led to the banning of leaded gasoline in the USA from 1990 and in parts of Africa from 2005.[31] Similarly, it was only shown by the late 1960s and early 1970s that studies in the United Kingdom revealed extensive lead

[28] Harrison first report para 25 pp 001-2640.

[29] AA para 285 p 001-2773; AA54 p 001-4731.

[30] Betterton second report para 12.60 p 001-9646.

[31] AA para 653.2 p 001-2906; Annexure AA8 para 6.6 p 001-3398.

contamination around lead-zinc smelters.[32]

55. As recently as 2002, the South African Minister of Labour made Lead Regulations[33] under the Occupational Health and Safety Act, 1993 which provides "that the control of exposure to lead in the workplace shall be regarded as adequate if … in the case of exposure to … ingestible lead, the blood lead level is less than 20µg/100ml" (emphases added)[34] – a value four times higher than the applicants regard, on the case pleaded in their draft particulars of claim ("POC"), as an injury. In terms of the same regulations, an employee is only "certified to be unfit for work in an area where he or she is exposed to lead" where their blood lead level exceeds 60µg/100ml[35] – a value twelve times that which the applicants regard as an injury.

56. These regulations continue to apply today.

57. The point is that it is untenable to apply hindsight to judge the actions or foresight of the Mine more than 50 years ago. A comparison with the Flint, Michigan class action settlement cited by the applicants is instructive. While it has no precedential value – being a settlement – it is based upon lead contamination that occurred less than ten years ago, and long after authorities across the world had started to appreciate the dangers of lead exposure to communities.

58. The applicants do not produce any evidence that Anglo was aware of the harmful

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[32] FA para 186 p 001-94, quoting Harrison report.

[33] "Lead Regulations, 2001" published under GN236 in the Government Gazette No. 23175 of 28 February 2002.

[34] Regulation 8(2)(d) of the Lead Regulations, 2001.

[35] Regulation 11(1)(b)(i) of the Lead Regulations, 2001.

effects of the Mine's activities to the nearby communities over the relevant period. The applicants' evidence reveals instead:

58.1. Anglo's knowledge of some harmful effects of lead to **workers** in lead mines, and the steps taken by the Mine to address those issues as they arose. That is not relevant to the present matter.

58.2. By the time that the Mine knew of potential harmful effects of its activities to what it called the "*bad sections*" of Kasanda, i.e. 1970, the Mine – according to the applicants' experts – had reasonable emission control systems.

58.3. Moreover, at the time the Mine commissioned investigations to be conducted into the effects of its mining on the nearby communities and took reasonable actions to combat community lead exposure – including by demolishing more than 400 houses and by establishing a residential area on the other side of the Mine, away from the prevailing wind.

59. The harm now contended for by the applicants was not foreseeable at the relevant period, nor for that matter, were the proposed classes, most of whom were yet to be born.

Breach of a duty of care

60. In **section three**, we contend that even if Anglo owed a duty of care to the proposed classes, the applicants have failed to demonstrate that they have an arguable case on the breach of that duty.

61. The applicants' case on breach of duty is based on the triple pillars of (i) a refusal to specify a standard of care to which Anglo could be held; (ii) a misreading of historical documents; and (iii) a tendency to adopt whichever version of (contradictory) theories of breach appears to suit them at the time.

62. The applicants' experts accept that, between 1946 to 1974, the Mine made significant and beneficial changes to its smelters and their air pollution control devices. The applicants' experts do not stipulate what the prevailing standards were at the time, nor can they, as a result, contend that the new technology over this period failed to conform to prevailing standards.

63. The applicants' case is thus bereft of any specification of what Anglo is said to have done wrong, because they fail to say what the reasonable miner in Anglo's shoes would have done differently to prevent or minimise lead emissions at the time.

64. Apart from a few isolated operational events that the applicants seek to elevate to systemic pollution control problems, there is no evidence at all from the applicants as to the deficiencies of the Mine's smelters over this period; nor the extent to which those smelters permitted the emission of lead fumes into the atmosphere. This stands in sharp contrast to the serious – and admitted – systemic issues highlighted by ZCCM itself in the period following 1974.

65. A good example of the applicants' misreading of historical documents is the so-called "Broken Hill attitude" report. The applicants seek to leverage it into evidence of a "dirty dysfunctional operation … of long-standing disregard and

neglect".[36] On a plain reading, the report is nothing more than a mundane document about in-plant operational housekeeping issues. Lead pollution or control is never mentioned in the report.

66. In contrast, the applicants' witness Dr Lawrence confirmed under oath that, in his view, "the Mine was run very efficiently" in 1969 and the early 1970s.[37]

67. The applicants' case is notable for what it does not contain. Despite frank and sometimes critical discussions, internal to the Mine, of housekeeping and ordinary operational issues, there is no sign of any malfeasance as would surface after the relevant period, from ZCCM's own internal documents.

68. The applicants support their misreading of documents by a tendency to conflate the distinctive roles played by Anglo, as an investor in and advisor to the Mine, and the Mine itself – at all times owned and operated by ZCCM.

69. It bears emphasis that, because the applicants have chosen to cite Anglo as the respondent, the applicants must show as a triable issue that Anglo has breached its duty of care. It is not enough for the applicants to show this in respect of the Mine, or any other entity. It is also not enough to point to the fact that Anglo accepted that the question whether it *de facto* controlled the Mine during the relevant period may only be resolved at trial.[38]

70. Even if Anglo did control the Mine during the relevant period (which is firmly in dispute), then the applicants still need to show exactly how, when and in what

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[36] Applicants' HoA para 148 p 007-72.

[37] Lawrence affidavit 16 December 2020 para 9 p 001-2551.

[38] Applicants' HoA para 46.1 p 007-29.

manner Anglo negligently controlled the Mine. So-called parent company liability is not a species of vicarious liability. It requires proof of the "*parent's*" own distinctive tortious conduct, which is entirely absent from the applicants' papers.[39]

71. Despite this, the applicants often refer to Anglo when they should be referring to the Mine or another entity, or blur the lines between Anglo and other juristic persons:

71.1. The applicants did this routinely in their papers, and especially in their replying affidavit, as pointed out by Anglo in its second affidavit.[40]

71.2. The pattern continues in the applicants' heads of argument:

71.2.1. At points, they refer to Anglo when they should be referring to the Mine. For example, they state that: "Anglo was responsible for 66% of lead pollution [sic: production?] over the lifetime of the Mine, resulting in a broadly commensurate level of lead pollution."[41] On no conceivable version of the facts is this a true statement. The Mine, under the direction of its Mine Manager, was responsible for all the production of lead over its lifetime.

71.2.2. At other points, the applicants use the passive voice copiously to obscure that an action was taken by the Mine, not Anglo; or

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[39] *Lungowe v Vedanta Resources* [2019] UKSC 20 para 49.

[40] Anglo's FA in strike-out application para 7 pp 006-9 – 006-10.

[41] Applicants' HoA para 46.4.2 p 007-30.

that a document was produced by the Mine or served before it – and not by or before Anglo. As an example:

> "In a 10 July 1970 meeting, reference was again made to the 'Lane Report', which was to be sent to the 'appropriate people' with a report on what action had been taken. The meeting notes listed a series of measures to be taken including watering dumps, tarring roads, and replacing 448 houses in the so called 'bad area'. At the same meeting, the death of a child from lead poisoning was raised in passing, before discussion swiftly moved on to planning for the new Waelz kilns."[42]

71.2.3. The use of the passive voice in this passage obscures the fact that the meeting at which *"*reference was … made*"* to various issues was a ZCCM meeting[43], not an Anglo meeting.

72. The applicants' only discernible theory of "*what went wrong*" in Kabwe during the relevant period was, in their founding affidavit, that the stack heights of the smelter stacks were too short – thus a fumigating and looping plume from the smelter delivered pollutants to the ground where they looped downwards and envelop nearby residences.

73. When Anglo pointed out in the answering affidavit that the stack heights were consistently increased with every technological upgrade during the relevant period, far beyond what the applicants' experts stated was required in the founding papers, the theory of breach changed. In the replying affidavit, the

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[42] Applicants' HoA paras 193 – 194 p 007-94.

[43] At the time known as Zambian Broken Hill Development Company, or ZBHDC.

applicants contend that tall smelter stacks were the cause for contamination in Kabwe, not short ones. The ostensible reason given in reply was that the fall-out from short stacks would not have reached the residential areas in Kabwe and that the tall stacks enabled contamination of the entire district.

74. The applicants are grasping at straws to construct a case without a basis in reality or history. They are willing to adopt diametrically contradictory case theories to see if any one of them could persuade a court that they have a plausible case.

Causation

75. In **section four,** we demonstrate that the applicants have failed to make out a triable case on the question of causation.

76. The facts show that the two most pollutive periods in the Mine's history occurred before and after the relevant period. Because injuries caused by lead exposure are divisible injuries, Anglo can only be held liable to the extent it contributed (in a culpable way) to such injuries. The applicants would have to show that any "guilty lead" emitted between 50 and 100 years ago, and which could be ascribed to Anglo's breach, contributes to current injury and that such contribution is more than *de minimis*. In such case, Anglo could only be held liable to the extent of the guilty contribution and no more.

77. The applicants have failed to come even close to showing what contribution (if any) such "guilty lead" makes to current injuries. They have failed to demonstrate that Anglo's as yet unidentified conduct, presumably in the form of an omission, caused any "guilty lead" to be emitted during the relevant period. The applicants

artificially extrapolate the amount of lead the Mine produced over the relevant period – being 66% – and conclude that Anglo caused 66% of the lead pollution. Such an extrapolation is not only logically flawed, but also unsupported by the applicants' facts.

78. In contrast, and without contradiction, Anglo has shown that the worst period of lead pollution in this history of the Kabwe Mine occurred after the relevant period. ZCCM operated the plant without any emissions controls and then exacerbated the situation by deciding not to remediate, but to sell off the land and waste dumps around the Mine to private investors and the contaminated mine houses to the community. Subsequently, it has taken incomplete and ineffectual steps to clean up what it admitted was its own mess – not that of Anglo.

79. In addition, the applicants have ignored various other multiple media of lead exposure experienced by the communities, to this day. As an example, it is common cause that lead naturally occurs extensively across the Kabwe district. Furthermore, current reprocessing of tailings directly linked to ZCCM's reckless disposal of the land around the Mine contribute to high levels of lead in the soil. Thus, the applicants concede that Kabwe "residents may still be affected by high lead levels in the soil, both from naturally occurring mineralization and the impact of the smelting and reprocessing of tailings". (Emphases added.)[44]

80. ZCCM's unreasonable conduct from 1974 onwards, and continuing up to this day, was entirely unforeseeable and outside the expected sequence of events. All over the world, remediation was successfully carried out in contaminated

[44] FA para 80.6 p 001-49.

smelter communities, with resultant declines in blood lead levels.

81. Any potential but speculative causal link between Anglo's conduct and the current situation in Kabwe was broken by the subsequent reckless conduct of ZCCM.

Remediation relief

82. In **section five**, we demonstrate that the applicants have not made out a case for the remediation relief they advance and that such relief is in any event inappropriate and incompetent in the form advanced.

83. The applicants have made no attempt to define and give content to what is meant by remediation. Their purported claims are for remediation of the "home environment" and the "local environment". It was incumbent on them to show that such remediation is possible – both in the sense that any actions to be taken would in fact be successful in remediation, but also that class members are in a position (legally and practically) to effect such remediation. They have failed to adduce any evidence in this regard.

84. The damages they claim in regard to such remediation relief has in any event not been shown to be determinable or allocable, as required by precedent. There is no evidence as to what remediation would entail or how it would be effected. But even worse, on what possible basis could the hypothetical cost of remediating (for example) school grounds be allocated as damages to any particular class member? The applicants' papers are silent on these issues.

85. The claim for remediation relief is so vague as to be indeterminable, particularly

when read with the extraordinary wide ambit of the class sought to be certified, both from a geographical and an injury perspective. It is not in the interests of justice to certify a class action which includes a claim for remediation relief.

The opt-out nature of the classes

86. In **section six**, we demonstrate that the wholly foreign op-out class proposed by the applicants is impermissible. Indeed, this Court has no jurisdiction over the members of the proposed classes if an opt-out basis is used. We submit that if a class action were to be certified at all, it must be on an "opt-in" basis.

The strike-out application

87. In **section seven**, we ask this court to strike out the new evidence of Professors Bellinger and Lanphear, introduced for the first time in reply. Their evidence pertains to population studies of injuries (in particular neurodevelopmental injuries) that may arise at BLLs lower than 10 µ/dL. In essence, the new case belated sought to be advanced by the applicants in reply is that injury is not only suffered at a BLL of 5 µ/dL and more, but rather includes all individuals with a non-zero BLL. This Court should not permit the applicants to make out a new case in reply, utilising the evidence of fresh experts.

Class definition

88. In **section eight**, we demonstrate that the proposed classes, as defined, are overbroad in three different respects.

88.1. First, they are geographically overbroad, in that both proposed classes

would include people residing anywhere in the Kabwe district, when, at best, the applicants' case justifies only including people residing in the so-called *"*KMC townships*"* that are directly around the Mine – namely Kasanda, Makululu and Chowa.

88.2. Second, they are overbroad in that they include people who have not suffered any injury as a result of exposure to lead.

88.3. Third, the second proposed class (women of child-bearing age) would include people whose claims have become time-barred.

89. This means that if a class action were to be certified at all, it must be on the basis of narrower, tightly defined classes.

90. The applicants approach this case as if certification on their terms is there for the taking. They completely disregard the screening function of the certifying court. They state as follows in their heads of argument:

> "If these members cannot prove their claims against Anglo because of issues that Anglo raises in an attempt to confine the size of the class, then they will obtain no relief at trial and Anglo will suffer no material harm by their inclusion."[45]

91. This lax test for certification is emphatically not the law, as we explain above. It is also bereft of any realism to state that Anglo is not prejudiced by classes containing 140 000 persons, as opposed to a much smaller number. The applicants' attitude in defining the overbroad classes (and then defending those

[45] Applicants' HoA para 237 pp 007-108 to 007-109.

definitions) are emblematic of their general disdain for the principle that certification must protect all parties, by weeding out unmeritorious claims.

Class action funding

92. In **section nine**, we provide an analysis of the funding arrangements by the funders of this litigation and demonstrate that:

92.1. The funding scheme proposes an excessive return to the litigation funders, who stand to make many multiples on their investment.

92.2. The fee and funding arrangements are unlawful and inappropriate and cannot be sanctioned by the court in their present form.

92.3. The applicants have not shown that they have the financial capacity to conduct the litigation.

92.4. These arrangements inadequately protect the interests of the proposed classes or Anglo.

92.5. They are geared to advance the financial interests of the funders and the lawyers, including by that the applicants are not in a position to exert actual control over the litigation.

Conclusion

93. In conclusion, we submit that:

93.1. This application for certification should be dismissed;

93.2. Alternatively, if the application for certification is to be granted at all, it should be granted on re-drawn and tightly defined classes, which must operate on an opt-in basis.

SECTION ONE: BACKGROUND FACTS

94. The town of Kabwe is situated in the Kabwe District in central Zambia. The town was previously known as “Broken Hill”.

95. Kabwe is the fourth largest city in Zambia. It is the capital of the Central Province and the seat of the Kabwe District.[46] The Kabwe District covers an area of almost 1 570 km^2 – the size of the City of Johannesburg. The applicants contend that it has a population in excess of 225 000. Members of the proposed classes are estimated to make up approximately 140 000 members of this population.

96. The events addressed in this proposed class action span more than 100 years. As a result, both the applicants and Anglo have been forced to rely on archival material including reports, contemporaneous correspondence, theses, and documents prepared by authors who have long since died or are otherwise untraceable.[47] As may be expected after such a time-lapse, the documentary record is incomplete.

97. What follows is an account based almost exclusively on such archival materials. Their content will not change at trial. Indeed, not a single member of the proposed classes can speak to conditions in Kabwe over the relevant period – which then was a far smaller community than it is now.

98. The applicants define the “relevant period” as 1925 to 1974. The draft POC sets out a claim against Anglo based only on conduct during the relevant period. This

[46] FA para 67 p 001-42.

[47] FA para 49 p 001-31.

recognises the absence of any role by Anglo in the operations of the Mine in its two most highly pollutive periods: 1904 to 1925 and 1974 until closure in 1994.

99. Although Anglo held an indirect minority stake in Zambia Consolidated Copper Mines Limited ("ZCCM") during the latter period, which followed nationalisation of the Mine, the applicants cannot meaningfully contest the evidence put up by Anglo that it had no say in the activities of the Mine after 1974. For this reason, Anglo's alleged acts and omissions during the relevant period represents the highwater mark for the applicants' case.

The establishment of the Mine

100. In 1902, an Australian geologist discovered rich deposits of lead and zinc in Kabwe. Zambia was, at that time, known as Northern Rhodesia.[48]

101. The Broken Hill Mine was established in Kabwe in 1904, under the ownership of the Rhodesia Broken Hill Development Company ("RBHDC"), a company registered in London. It is common cause that Anglo had nothing to do with the establishment of the Mine, or RBHDC, and had no link with them until 21 years later, in 1925.

102. The Mine commenced production in 1906, but did not start producing finished lead until 1915. It operated for almost 90 years until it was closed in 1994. During its lifetime it produced many tens of thousands of tonnes of lead and zinc. At its inception, RBHDC was owned by the Rhodesia Copper Company which was

[48] FA para 68 p 001-42; AA para 68.2 p 001-2699.

associated with the British South Africa Company.[49]

103. At all times from its inception, until a corporate reorganisation on 1 January 1971, the Mine was owned and operated by RBHDC.[50] Thereafter, through a series of seamless reorganisations, ZCCM subsumed RBHDC, as we show below, so that the Mine was, at all times, owned and operated by the same company – which is now known as ZCCM. This is the company that the applicants, perversely, refuse to hold responsible despite the fact that it has incontrovertibly by far the closest connection to the environmental lead pollution in Kabwe. Proceeding with this class action in South Africa means that ZCCM will never be held responsible for the reckless conduct it perpetrated between 1974 and the present – on which we elaborate below – because the South African courts have no jurisdiction over it.

104. During 1907 (being 10 years prior to Anglo's incorporation and 18 years prior to its involvement in the Mine), RBHDC and the British South Africa Company were in the process of selecting and developing township sites which, the applicants believe, were the sites that would later develop into the present-day Kasanda and Makululu.[51]

105. The Mine, known after 1966 as the Kabwe Mine, operated in Kabwe from 1906 to 1994. It was a lead and zinc mine.[52] In its heyday, it was the largest lead mine

[49] FA para 71 p 001-43; para 88 p 001-54; AA paras 68.3 to 68.4 p 001-2699.

[50] AA para 69 p 001-2700.

[51] FA para 159 p 001-82.

[52] FA para 26 p 011-24; para 51.9 p 001-33.

and smelting operation on the African continent.[53]

106. As the Mine developed, the type of ore mined, and the metal recovered changed:

106.1. Early mining initially focused on the extraction of high-grade oxidized zinc ore, but this shifted to mining and refining lead. Initially, open cast mining techniques were used to extract cerussite (lead carbonate).[54]

106.2. At the end of 1929, commercial-scale smelting operations for lead were discontinued as the lead ore above the groundwater level had been mined out.[55]

106.3. During 1937, the Mine sank a shaft below the water level to mine the substantial submerged ore to allow the Mine a new lease on life.[56]

107. From the inception of the Mine to 1946, the Mine used open blast furnaces to produce lead.[57] It is common cause that:

107.1. The open blast furnaces did not employ any protection against the emission of lead pollution and were orders of magnitude more pollutive than the technologies employed later in the life of the Mine.

107.2. Anglo had no link to the overwhelming majority of lead produced in the era before 1946: By 1925, the Mine had produced 12% of its lifetime

[53] FA para 68 p 001-42.

[54] AA para 95 p 001-2705.

[55] AA para 107 p 001-2708.

[56] FA para 101 p 001-57.

[57] FA para 151.1 p 001-79.

production.[58] Between 1925 and 1945, the Mine produced approximately 3% of its lifetime production.[59]

The operations from 1925 to 1946

108. Tellingly, in 1924 – before Anglo's involvement – there were reports by the Kabwe Town Council of "*one or two deaths*" occurring from lead poisoning due to this unmitigated lead pollution. The applicants do not (and indeed cannot) suggest that Anglo was aware thereof.[60]

109. In any event, on the applicants' own version, there were no further deaths or indeed lead-related illness reported of members of the surrounding community until approximately 1969 and the early 1970s, at the very end of the relevant period. Thus, until the very end of the relevant period, there is no evidence on the papers that the pollution controls at the Mine failed to prevent injury or death of community members due to lead exposure. The applicants' suppositions in their heads of argument are not based on evidence, but on conjecture.

110. Anglo was incorporated in 1917 and was formerly known as "*Anglo American Corporation of South Africa Ltd*". Anglo was the parent company and head office of the Anglo American Group ("Anglo Group") until 1998. On 24 June 2019, Anglo changed its name to "*Anglo American South Africa (Pty) Limited*".[61]

111. During 1925, Anglo acquired, for the first time, a shareholding interest in RBHDC.

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[58] AA para 98 p 001-2706.

[59] AA paras 107 and 109 pp 001-2708 to 001-2709.

[60] FA para 160 p 001-83; AA para 1131 p 001-3084.

[61] FA paras 21 to 22 p 001-23; AA para 983 p 001-3053.

In 1926, a portion of Anglo's shareholding was indirectly held via New Era Consolidated Limited.[62]

112. At all relevant times, RBHDC employed its own Mine Manager who was responsible for the mining operations.[63] Between 1915 and 1925 (i.e. before Anglo's involvement) the Mine produced 105 000 tons of lead under circumstances where lead emissions were completely unimpeded.[64] It is common cause that this period was highly pollutive.

113. Between 1925 and 1927, Anglo was the consulting engineer to RBHDC.[65] There is no evidence on the papers of the role of a consulting engineer (or, for that matter, the other advisory roles that Anglo or one of its subsidiaries played over the years); or that a consulting engineer's functions somehow trumped that of the Mine Manager, who carried the responsibility for the Mine's operations.

114. In addition to Anglo as the consulting engineer, the Mine had the following technical expertise unrelated to Anglo between 1925 – 1927:

    114.1. The Central Mining and Investment Corporation Limited as consulting electrical and mechanical engineers (1925-1926); and

    114.2. HR Stevens as the general manager and chief metallurgist at the Mine.[66]

115. During 1928, Anglo established a company called Rhodesian Anglo American

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[62] AA para 71 p 001-2700.

[63] AA para 76 p 001-2701.

[64] AA para 678.1 p 001-2913.

[65] FA para 81.2 p 001-51 read with para 97 p 001-56; AA para 104 p 001-2708.

[66] AA para 105 p 001-2708.

Limited ("RAAL") in London, with its principal object being to finance various Northern Rhodesian enterprises in which Anglo had an interest; and to be the vehicle through which those interests were held.[67] Thus, from 1928, RAAL acquired shares in RBHDC.[68] RAAL was at all relevant times the direct but minority shareholder in RBHDC. RBHDC and RAAL were listed entities at various points in time.[69]

116. In general, and throughout the relevant period, Anglo held a minority interest in RBHDC of ±10% through RAAL.[70]

117. RAAL served as consulting engineer to the Mine from 1928 to 1929. In 1930, lead production at the Mine was suspended until 1936.[71] There was no consulting engineer at RBHDC from 1930 to 1936, and no lead was produced during this time.[72]

118. Anglo served as the manager and consulting engineer to the Mine from 1937, when limited war-time lead production resumed, to 1949.[73]

119. Between 1925 and 1937, the Mine produced approximately 2.4% of its lifetime production. Between 1937 and 1945, the Mine produced less than 1% of all lead produced over its life – clearly a *de minimis* contribution to the total lead

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[67] AA para 71 p 001-2700.

[68] FA para 93 p 001-55.

[69] AA paras 1077.1 to 1077.2 p 001-3071.

[70] AA para 164 p 001-2727.

[71] FA para 81.3 p 001-51; AA para 75 p 001-2701.

[72] FA para 95 p 001-56; AA para 75 p 001-2701.

[73] FA para 81.4 p 001-51; AA para 76 p 001-2701.

production.[74]

The modernisation of lead smelting at the Mine: 1946 to 1962

120. The Mine used various smelting methods and equipment over the years. These changes progressively reduced emissions in line with the development of technology across the world:

120.1. Up to 1946, the Mine used open blast furnaces that contained no pollution controls.

120.2. In 1946, the Newnam Hearth plant was installed at the Mine.

120.3. In 1953, new Dwight-Lloyd sintering machines were installed at the Mine, together with new lead blast furnaces.

120.4. In 1957, the new lead blast furnaces were decommissioned, and the Mine returned to using the Newnam Hearth plant for lead production. At the same time, the Mine established a project team to study smelting technology at other plants around the world.

120.5. As a result, in 1962, the Mine installed a new Imperial Smelting Furnace ("ISF") and sinter plant, which operated for the remaining life of the Mine.[75] Both the ISF and sinter plant were state of the art at the time.[76]

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[74] AA paras 107 and 109 pp 001-2708 to 001-2709.

[75] FA para 103 p 001-58.

[76] AA para 138 p 001-2718.

121. During this period, and until 1962,[77] Anglo remained the consulting engineer to RBHDC.

122. A Northern Rhodesian based entity, Rhoanglo Mine Services Limited was formed in 1952, which provided central research facilities and other centralised technical services to the Mine.[78]

123. During 1955, it was decided that the consulting services required by the Anglo Group Companies in the Central Africa Federation should, as far as possible, be provided by the office which Anglo had established in 1954 in Salisbury (now known as Harare), then the capital of the federation of Rhodesia and Nyasaland. This decision was implemented in January 1956 when the consulting engineers to the Rhodesian mining companies and certain technical, geological and clerical personnel were transferred from Johannesburg to Salisbury. The Salisbury office then furnished technical and administrative services to the federation companies in the Anglo Group.[79]

124. In 1957, the Mine established a project team to study smelting technology at other plants around the world, resulting in the installation of the ISF in 1962. In the course of these investigations, the project team visited Avonmouth in England, the home of the Imperial Smelting Corporation.[80]

125. It is clear that, in the conception and installation of the ISF at Kabwe, the health

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[77] AA para 76 p 001-2701.

[78] AA para 77 p 001-2701 and para 1077.4 p 001-3071.

[79] AA para 81 p 001-2703.

[80] FA para 152 p 001-80.

and safety of the Mine's employees were top of mind: By 1961, the Mine had spent an additional sum in excess of £1 000 000 (one million pounds), being the equivalent of approximately £18 307 995.02 (or nearly R360 million) in 2021, for the installation of the ISF. The Mine required extensive modifications of certain sections of the design. As appears from RBHDC's annual report of December 1961, the reason for this enormous additional expense was to aim at a higher standard of waste gas cleaning for health reasons.[81]

126. The applicants say that, because the pollutive effects of the ISF later became clear (on their own version, in the 1970s),[82] the project team, based on its visit to Avonmouth in 1957 "could have been in no doubt about the potential risks of lead pollution arising from this smelting technology."[83] But this is an obvious chronological fallacy, characteristic of much of the revisionist history peddled in the applicants' papers and their heads of argument.[84]

Reports of lead contamination in areas surrounding the Mine begin to emerge

127. It is common cause that it was only in the late 1960s and early 1970s that extensive research was conducted on lead in the environment. Studies at this time showed lead poisoning of livestock in the vicinity of lead mines and smelters. Around this time, studies such as those around the Avonmouth lead-zinc smelter

[81] AA para 137.3 p 001-2718.

[82] FA para 152.2 p 001-80.

[83] FA para 152.3 p 001-80.

[84] E.g. Applicants' HoA para 179.2 p 007-87: "The ISF process would later be shown to generate appreciable pollution of the terrestrial and aquatic environment in the surrounding area in Avonmouth. Nevertheless, Anglo's consulting engineers recommended that the ISF and ancillary plant be erected at the Mine."

and the Swansea Valley were revealing lead contamination.[85] Indeed, as Anglo's expert Mr George explains:

> "Even in the USA, it was not until the 1970's that the full impact of lead exposure on the public was brought into clarity. This late recognition of lead as a serious environmental problem was not driven by lead from lead smelters but lead from tetraethyl lead in gasoline (only banned in the USA in 1990 and in parts of Africa in 2005) and lead in paint. These were the triggers for the current lead emission and environmental standards. The Mine cannot be faulted for failing to recognize this trend decades before others" (Emphasis added).[86]

128. This is confirmed by Prof Betterton's observation that it was only in the mid- to late 1970s that the US Environmental Protection Agency first issued standards for ambient airborne lead.[87] And it was not until the 1990s and 2000s that lead in petrol was gradually phased out, including in South Africa.[88]

129. At Kabwe, too, it was only by the 1960s (during the relevant period) that reports started to emerge of damage to crops and livestock in farms in the vicinity of the Mine, and by 1969 and the early 1970s of injuries and deaths of children in the community closest to the Mine. As appears below, the Mine acted with alacrity to address the full extent of the danger as it had emerged by that time. The lead pollution dangers that later eventuated, after the disastrous stewardship of ZCCM, cannot be ascribed to the Mine's activities by 1974.

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[85] FA para 186 p 001-94, quoting Harrison report.

[86] AA para 653.2 pp 001-2906; Annexure AA8 para 6.6 p 001-3398.

[87] Betterton second expert report para 12.60 p 001-9646.

[88] AA paras 56 to 57 pp 001-2689 to 001-2690.

130. Indeed, the contemporary documents bear out the proposition that the Mine (and thus, much less Anglo) was not aware until the late 1960s of any adverse health effects on the surrounding community. They reveal the following:

130.1. The Mine compiled the 1962 RBHDC Annual Report by 22 January 1963 which state that, "[t]he Broken Hill Mine Township continued to maintain a healthy and sanitary state and no outbreak of any serious epidemics occurred".[89]

130.2. The Mine compiled the 1963 RBHDC Annual Report by 28 January 1964 which states that the health of dependants of African employees (i.e. persons who lived in the surrounding communities) "remained satisfactory". No incidence of lead absorption, or other lead-related maladies, is noted. On the contrary, the notes recorded that, "[t]he Broken Hill Mine Township continued to maintain a healthy and sanitary state".[90]

130.3. Representatives of the Mineworkers Union of Zambia and from ZEMA (Zambia Environmental Management Agency – a government agency) participated in the Mine's ISF Safety meeting on 15 November 1968. The minutes of the meeting do not note any concern or awareness of potential adverse effects of lead contamination on surrounding communities – despite detailed attention to all safety issues, including

[89] Anglo's FA in strike-out application para 82 p 006-36; Annexure ZMX98 p 001-7928.

[90] Anglo's FA in strike-out application para 60 p 006-26 and para 61.3 p 006-27; Annexure ZMX95 pp 001-7892 to 001-7893 and p 001-7888.

"lead in air".[91]

131. It is difficult to appreciate on what basis the applicants can challenge these historical recordals of the Mine's knowledge of the situation in Kabwe; or on what basis they can contend that Anglo knew or should have known more or better than the Mine. Their case is simply based on conjecture derived from contemporary knowledge of lead pollution in Kabwe, after the pollution of the last 50 years under the stewardship of ZCCM.

132. In 1966, the Mine (and Zambian Broken Hill Development Corporation, "ZBHDC") became aware of a claim by a farmer downriver from the Mine (a Mr Routledge). He instituted a claim against ZBHDC flowing from deaths of his sheep and damage to his vegetables and flowers during the period immediately preceding June 1966. Mr Routledge appears to have suspected, and the Mine appears to have concurred, that the damage occurred due to pollution from the Mine's tailings dam – both in the form of seepage into the Kamakuti Dambo and the Mushishi River, and also from two breaks in the tailings dam which occurred in 1960 and April 1965.[92]

133. The documents attached by the applicants regarding the insurance claim flowing from these events do not show that the farmer's damage was caused by lead; does not point to any danger to the communities surrounding the Mine; and does not refer to Anglo at all. It does show, however, steps taken by the Mine to

[91] Anglo's FA in strike-out application para 84.3 p 006-36; ZMX100 pp 001-7936 to 001-7938.

[92] Anglo's FA in strike-out application paras 71-72 p 006-31; Annexure ZMX97 pp 001-7908 to 001-7912.

prevent a recurrence of the situation.[93] Nevertheless the applicants seek to make of this irrelevant insurance claim a touchstone of their case.

134. In around 1970, Dr Ian Lawrence was employed as a medical doctor at the Kabwe Mine. He tested approximately 500 blood samples from children living in the vicinity of the Mine and found high blood lead levels ("BLLs").[94] Within a month, his research led to the commissioning of a report by the Mine from a Professor Lane and a Mr King of Manchester University.[95] It also led to extensive investigations into children's blood lead levels being carried out by Nchanga Consolidated Copper Mines Ltd ("NCCM", a predecessor of ZCCM of which ZBHDC became a division in 1971) around 1972.[96]

135. On 9 July 1970, someone acting on behalf of the Mine Manager, Mr Trevor Lee-Jones sent a note[97] to the consulting engineers at the time, who were Anglo American Corporation (Central Africa) Limited ("AACCA") (not Anglo). The note shows that:

135.1. By that time, i.e. 9 July 1970, the Mine was aware of a "lead problem" affecting a township. (The documents do not show which township, but it appears to be the A, B and C sections of Kasanda.)

135.2. For that reason, the Mine deputised Mr Barlin – the Assistant Mine Manager – to meet on 10 July 1970 in Lusaka with representatives of

[93] Anglo's FA in strike-out application paras 74-75 pp 006-32 to 006-34.

[94] Supp FA paras 9.1 to 9.3 p 001-2544; AA paras 1343 to 1344 pp 001-3141 to 001-3142.

[95] Supp FA para 10.2 pp 001-2545 to 001-2546; AA para 1353 p 001-3143.

[96] Supp FA para 10.3 p 001-2546; Lawrence affidavit para 26 p 001-2553.

[97] Annexure ZMX107 p 001-7972.

AACCA (not Anglo), which was based in Lusaka.[98]

136. The note then refers to Mr Lee-Jones' "apparent change of view on the Laine recommendations". This is an apparent reference to recommendations made by Professor Lane and Mr King, which apparently were to move the township alternatively to scrape the top layer of ground from the township area and replace it with unpolluted material; and also to cover the (mine) dumps and tar the roads.[99]

137. Mr Lee-Jones objected against moving the township because, in his view, it would be far too expensive. He also objected to the proposal to scrape the top layer of ground because it was "thoroughly impracticable because of pipes, cables, house foundations, etc., and also because it would lead to potential panic".[100]

138. However, Mr Lee-Jones agreed that "something should be done about the dumps and that roads should be tarred, but he has also recommended building 488 new houses and pulling down a similar number in Blocks A. B and C".[101]

139. The minutes of the meeting on 10 July 1970[102] show that:

139.1. Mr Barlin met with various officials of AACCA and the "immediate reason" for the meeting was that a medical officer "at the Mine has

[98] Anglo's FA in strike-out application para 120 pp 006-49 to 006-50.

[99] Anglo's FA in strike-out application para 120.5 p 006-50.

[100] Anglo's FA in strike-out application para 120.6 p 006-50.

[101] Anglo's FA in strike-out application para 120.7 p 006-51.

[102] Annexure ZMX105 pp 001-7969 to 001-7970.

certified a child to have died of lead poisoning". This is clearly the "lead problem" that the note referred to and for which Mr Barlin had travelled 140 km from Kabwe to Lusaka.

139.2. In regard to lead pollution, the meeting decided on the following actions:

139.2.1. "Begin watering dumps, including fixing plant effluent on to dumps. This is considered better than sealing dumps."

139.2.2. "Begin watering roads in the bad area (A, B & C areas) and beyond. Begin tarring the roads other than in the bad area. Tackle those where the traffic density is highest."

139.2.3. "Accept that 448 houses in the bad area should be replaced and the area not used again for housing."

139.2.4. "[ZBHDC] to cost two alternatives for the bad area, one of which will certainly be necessary if the housing programme is stretched out: (i) scraping off the top 3" of soil wherever possible (it is not practicable to dig over the subsequent 18" recommended by Lane because of pipes etc.); (ii) to put a 3" laterite cover on roads and whereover possible. Either of these has an industrial relations impact and will only [be] implemented if considered essential."

139.2.5. "Aim to send the Lane Report to the appropriate people next week with a covering letter mentioning briefly what has been done. (VWH has already told Michaelvlei *en passant* of the

child's death.)"[103]

140. It is notable and telling that the death of this child, mentioned in this document from 1970, was the first such occurrence since 1924 mentioned in the applicants' heads of argument. It appears that the Mine (and thus much less Anglo) could not have known of death or injury caused by lead poisoning to community members before that time.

141. On 7 September 1970, Mr Lee-Jones directed a letter to AACCA.[104] The letter shows that ZBHDC was taking far-reaching actions to address the dangers from lead pollution that came to its attention at this time:

141.1. The letter confirmed approval of capital expenditure for the flooding of dumps and the tarring of roads.

141.2. The mine dumps would be sprayed, creating water curtains to allay dust. Some residential areas would also be provided with perimeter sprays. The cultivation of vegetation will be intensified on the outermost retaining walls.

141.3. 55 200 m^2 of road would be tarred, with the objective to complete this during 1970.

141.4. A, B and C sections (of Kasanda) would be razed. Thus, it would not be necessary to remove topsoil and provide laterite topping. In the

[103] Anglo's FA in strike-out application para 121.3 pp 006-51 to 006-52.

[104] Annexure ZMX76 pp 001-1195 to 001-1199.

meantime, watering of roads in the area is being done on a daily basis using tractor drawn water tanks.

141.5. In relation to the replacement of the A, B and C section houses, a site suitable for 800 houses has been selected to the leeward of the plant in a medium-density housing scheme. The new houses would be completed by April 1973 at the latest.[105]

142. The "medium-density housing scheme" foreshadowed in Mr Lee-Jones' letter eventually became Chowa township. Between January and June 1973, a rehousing scheme relocated 3 000 people from what the Mine at that stage identified to be the "bad area" of Kasanda to Chowa.[106]

143. Thus, upon becoming aware of lead dangers to the community, the Mine investigated the situation with alacrity and took detailed and appropriate steps, taken at great cost by the Mine, to address the problem. The Mine's steps in response to the known danger was reasonable.

144. These actions were in marked contrast to the inaction of ZCCM when it was faced with a far larger problem and much more information on the problem in the late 1980s and early 1990s. Instead of razing contaminated houses and rebuilding them in a safe area, ZCCM, with knowledge of danger and harm, sold these houses to its ex-employees and the public. Indeed, the applicants in this matter all reside in the KMC townships, where these houses are located; and

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[105] Anglo's FA in strike-out application para 123 pp 006-52 to 006-55.

[106] Anglo's FA in strike-out application para 124 p 006-55; AA paras 1168 and 1193 pp 001-3096 to 001-3097 and pp 001-3103 to 001-3104.

were all born decades after Anglo's involvement ended in 1974.

145. In the early 1970s, Dr ARL Clark was a medical officer at the Mine. For purposes of his masters' degree at the London School of Hygiene and Tropical Medicine, he took air, soil and water samples in parts of Kabwe and measured the blood lead levels of a sample of residents.[107] His study dealt with the sources and health impacts of lead pollution in Kasanda, Makululu and Chowa ("KMC") townships between 1971 and 1974.[108] His study was the first to study and record the health effects of lead pollution on the local community.[109] The findings from Clark's research also coincides with the end of the relevant period.[110]

146. During 1972 to 1974, AACCA designed a Waelz kiln which was installed in 1975 at the Mine. Waelz kilns are equipment specifically designed to treat accumulated tailings, slag and residue from previous smelting operations, the product of which is then fed into the ISF to produce lead.[111]

147. Importantly, the applicants do not show that the Waelz kilns were negligently designed. There is, however, ample evidence that, post 1974, ZCCM negligently operated the Waelz kilns, leading to the continued dangers posed to the surrounding communities by a lead-rich tailings dump.[112] The elevated lead levels in the Waelz kiln slag created an ongoing emission source through windblown dust that continues to impact Kasanda and other nearby residential

[107] FA para 30 p 011-26.

[108] FA para 80.1 p 001-48.

[109] FA para 183 p 001-93.

[110] AA para 1175 p 001-3098.

[111] FA para 121 p 001-63; AA paras 1080 to 1082 p 001-3072.

[112] AA paras 224 to 230 pp 001-2752 to 001-2754.

areas. Anglo had no involvement and is accordingly not liable in this regard.

Independence, nationalisation and the end of the relevant period in 1974

148. To contextualise the impact of nationalisation it is necessary to retrace aspects of the chronological background.

149. After 1962, Anglo no longer acted as the consulting engineer to the Mine.

150. In 1963, a new entity was incorporated and registered, namely AACCA. Upon its formation, AACCA was appointed secretaries and technical adviser to RBHDC.[113]

151. From 1963/4 to 1974, AACCA was also the consulting engineer / technical adviser to the Mine.[114] AACCA was a subsidiary of Anglo.[115] Anglo's minority shareholding interest in RBHDC continued to be held through RAAL.[116] The applicants have made out no case that Anglo took over the management of AACCA or in any other way acted through AACCA in a way that makes Anglo liable for AACCA's acts or omissions.

152. AACCA held the appointment to RBHDC[117] as technical adviser, from 1963 through to 1974. It provided services from its offices in Lusaka and, on occasion,

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[113] AA para 84 p 001-2703.

[114] FA para 109 p 001-160; AA para 165 p 001-2727.

[115] FA para 110 p 001-60.

[116] AA para 84 pp 001-2703 to 001-2704.

[117] Later renamed ZBHDC and then subsumed into NCCM which became ZCCM.

Kitwe.[118]

153. In 1964, the Republic of Zambia gained independence from the United Kingdom. In 1965, the Mine's owner, the RBHDC, changed its name to ZBHDC.[119] RAAL likewise changed its name to Zambia Anglo American Limited ("ZAAL").[120]

154. In August 1969, the then president of Zambia announced that the Zambian government would acquire control of the mining industry through a process of nationalisation. This resulted in a series of restructurings and schemes of arrangement and gave birth to the creation of the state-controlled NCCM with effect from 1 January 1970.[121]

155. With effect from 1 January 1970, the Zambian government acquired 51% of NCCM and its associated copper mines, with Zambia Copper Investments Limited ("ZCI") holding 49%. ZBHDC became a division of NCCM in 1971.[122] NCCM acquired ZBDHC's mining assets, undertakings and liabilities through a scheme of arrangement.[123]

156. Thus, from 1971, nationalisation had the inevitable and intended effect that the Zambian government, and not the former shareholders of ZBHDC – in which Anglo held a small, indirect shareholding – controlled the Mine through its "A" ordinary shares and the "A" directors on the Board of NCCM. (We deal with the

[118] AA para 85 p 001-2704.

[119] FA para 108 p 001-60.

[120] AA para 87 p 001-2704.

[121] AA para 1967 p 001-272.

[122] FA para 114 p 001-61.

[123] AA para 168 p 001-2728.

position of the “B” directors below.) Decisions regarding capital expenditure (or even closure) of the Mine reposed in the board of NCCM and not, as the applicants imply, in Anglo (or even the former shareholders, such as ZAAL).

157. On 26 June 1970, NCCM, ZAAL and Anglo American Corporation Management and Services AG (“AACM”) (among other entities) and the Zambian government concluded a Managerial, Consultancy and Metal Marketing Agreement.[124] In terms of this agreement, AACM would provide managerial, consultancy, metal marketing and other services to the NCCM mines, including the Mine until 1979.[125]

158. Thus, between 1970 and 1974, AACM – not Anglo – provided managerial, consultancy, metal marketing and other services to the Mine while AACCA (not Anglo) provided technical advice.

159. Subsequently, and with effect from 1 April 1981, NCCM merged with Roan Consolidated Mines Limited, which was then re-named ZCCM. The merger had the effect that all of NCCM’s liabilities were transferred to ZCCM (equally a Zambian government-controlled entity.)[126] Thus, seamlessly, the liabilities of the original and constant owner and operator of the Mine was located in ZCCM, where it remains to date.

160. ZCCM itself changed its name to ZCCM-IH from 15 August 2000.[127] ZCCM and

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[124] FA para 51.8 p 001-33; AA para 171 p 001-2728.

[125] FA paras 115 to 116 pp 001-61 to 001-62; ZMX42 pp 001-925 to 001-955.

[126] AA para 169 p 001-2728.

[127] AA fn 105 p 001-2727.

its predecessor NCCM[128] conducted and controlled the mining operations at the Mine from 1974. ZCCM thus acquired the assets and assumed the liabilities of RBHDC.[129] Various schemes of arrangement and agreements seamlessly transferred all of ZBHDC's accrued liabilities to NCCM, and later to the Zambian government-controlled entity, ZCCM.[130]

161. The term of the Managerial, Consultancy and Metal Marketing Agreement was agreed to be until 1979, but the Zambian government terminated it with effect from 1 August 1974. On the applicants' own version, this represented the end of the "relevant period".[131]

162. The relevant period of Anglo's involvement in the Mine is, on the applicants' own version, the period from 1925 to 1974.[132] As stated, the applicants make out no case that Anglo had any culpable involvement in the Mine's activities in the two most heavily pollutive periods of the Mine's existence: before 1925 and after 1974. If they had any evidence to do so, they would have pleaded this case in their draft POC.[133]

163. Thus, at the end of the "relevant period" on 1 August 1974, the Mine remained under the control of its owner and operator, NCCM; and continued as such as a going concern (its assets and liabilities still remaining with NCCM as the

[128] For convenience, NCCM, ZCCM and ZCCM-IH are all referred to as ZCCM in what follows.

[129] AA para 8 p 001-2676.

[130] AA para 170 p 001-2728.

[131] FA para 111 p 001-61; para 119 p 001-62; AA para 172 p 001-2728.

[132] FA para 81 p 001-51.

[133] Draft POC pp 001-149 to 001-190.

successor-in-title to RBHDC).[134] The ultimate shareholders changed, but the personnel running the Mine remained the same. Accordingly, from 1974 to 1994, operations continued under the control of NCCM (to 1981) and ZCCM (to 1994).[135]

164. It should be clear that RBHDC (in all its various guises) had operated the Mine from its inception in 1904 to 1994. ZCCM (through its corporate predecessors) simply subsumed RBHDC through a series of corporate reorganisations.[136] Despite this, the applicants refuse to hold ZCCM responsible for any of their injuries but prefer to pursue the perceived deep pockets of Anglo.

1974 to closure in 1994

165. It is uncontroverted that ZCCM operated the Mine (and in particular the smelter) in a grossly negligent and reckless fashion between 1974 and 1994, when the Mine was closed. It is further undisputed that, in the years following the closure in 1994, there has been significant artisanal mining of the dumps, and processing of lead, with significant discharge of lead from the dumps.

166. For years, there was no emission control when the electrostatic precipitator, a piece of equipment central to emission control, was broken and neither repaired nor replaced, while smelting continued. By the time the Mine was closed in 1994, ZCCM had been operating its lead smelter for 12 years without adequate

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[134] AA para 1005 p 1-3057.

[135] FA para 123 p 001-64.

[136] AA para 163 p 001-2727.

atmospheric emission control, and for 5 years without any such control.[137]

167. During this period, lead pollution emanating from the ISF and the sinter plant increased markedly, due to several gross failures on the part of ZCCM to maintain these plants. These failures included:

167.1. Poor maintenance of the ISF/sinter plant, including the failure to clean and maintain the conditioning towers and precipitator rappers which form part of the electrostatic precipitator, a vital component of the air emissions control system.

167.2. Continued lead production for several years when the precipitator of the ISF/sinter plant stopped working and a failure to repair it.

167.3. Continued lead production for several years when the base of the non-functioning precipitator collapsed. The base of the precipitator was subsequently removed and never replaced, resulting in a higher concentration of lead fumes being discharged further and at lower height levels towards the township.

167.4. The prioritisation of lead production over controlling emissions and the refusal and failure to maintain and repair parts of the deteriorating ISF/sinter plant that did not directly contribute to lead production.[138]

168. ZCCM acknowledged these failures but apparently did nothing to correct them. In the 1980s, it was trying to conserve cash and particularly forex reserves by

[137] AA paras 11 to 12 p 001-2677.

[138] AA para 178 pp 001-2731 to 001 2732

not buying new parts and by not carrying out required maintenance – seemingly in the expectation that the Mine would be closed imminently. This only occurred in 1994. By that time, ZCCM had released a vast amount of pollutive lead into the atmosphere, with attendant long-term consequences for the health of the surrounding community.[139]

169. All indications are that lead concentrations in air, BLLs and lead-in-soil concentrations increased by many times between 1974 and 1994.[140] The applicants do not, and cannot, establish that the current harm is attributable to conduct between 1925 and 1974, *inter alia* because of this indisputable fact.

170. When the precipitator was non-operational after 1984, emissions from the sinter plant and ISF are likely to have returned to levels comparable to the early blast furnaces.[141]

171. Looking back on the period during which the precipitator collapsed, ZCCM frankly acknowledged that the period between 1989 to 1991 was most likely the worst period of lead pollution in the history of the Mine. In a ZCCM memo, dated 28 August 1996 under the heading “lead in blood – historical comparison” it stated that:

> “The collapse of the base of the Electrostatic Precipitator on 10 January 1989 and its subsequent removal and non-replacement from the discharge circuit, significantly increased the discharge of fumes further and at lower

[139] AA para 178 p 001 2732

[140] AA para 179.1 to 179.4 pp 001-2732 to 001-2733

[141] AA para 140.3 p 001-2719.

height levels. This meant high concentrations of lead being projected and setting into the mine townships.

"Hence the period between 1989 – 1991 (for which sufficient data was located) most likely represents the worst period of lead pollution, in the history of the Kabwe Mine, and is marked by an increase in blood lead levels of 20 – 100% from the 1983 levels, for the age group of 0 – 5 years old in Chowa and Kasanda."[142] (Emphasis added.)

172. The applicants seek to ignore these facts, although they cannot controvert them. ZCCM has admitted its own culpability for "the worst period of lead pollution, in the history of the Kabwe Mine", yet the applicants prefer to fabricate a case against Anglo through hindsight theory and unsupported conjecture by their experts.

173. It is correct that, after 1974 and until 2000, Anglo retained an indirect shareholding in NCCM, and later ZCCM.[143] One of NCCM's, and thereafter ZCCM's shareholders, ZCI, appointed persons to serve as non-executive "B" directors on the board of NCCM and thereafter ZCCM.[144] Anglo in turn held a minority indirect interest in ZCI.[145]

174. The applicants are unable to show – even on a *prima facie* basis – that Anglo played any role relevant to ZCCM's reckless operation of the Mine after 1 August 1974, which is why they limit the relevant period to end on that date. They have

[142] AA para 253 pp 001-2760 to 001-2761.

[143] AA para 1085.4 p 001-3073.

[144] AA para 1085.5 p 001-3073.

[145] Anglo's FA in strike-out application para 139.1 pp 006-60.

not tried to plead such a case in their draft POC either.

175. Faced with the incontrovertible evidence of ZCCM's reckless neglect in Anglo's answering affidavit, they have suggested in the replying affidavit – through speculation and innuendo – that they may yet seek to make out such a case in future.[146]

176. The attempt would be stillborn, as shown by the evidence of Mr Jack Holmes, an erstwhile "B" director of ZCCM:

176.1. Although ZCI could appoint the "B" directors, they were by design (and as a consequence of nationalisation) a minority on the ZCCM board and were tolerated rather than welcomed.

176.2. The "B" directors were not even invited to visit the ZCCM mines or (before political changes in 1990) included in planning or budgeting discussions.

176.3. The board of ZCCM was focussed on the declining performance of its copper assets. Operational and environmental matters at Kabwe were not reported at board level.

176.4. The "B" directors were not briefed on adverse health related issues impacting Kabwe, and were not briefed on the closure plans for Kabwe. Accordingly, and simply due to a lack of any knowledge or involvement, at no time during that period did Mr Holmes elevate any concerns about

[146] RA para 170 p 001-7656.

ZCCM's activities in Kabwe to ZCI (or even less, Anglo). There was nothing to elevate, because there was nothing reported to the board.

176.5. The "B" directors had no power or influence to change the direction of the board absent agreement of the "A" directors, appointed by the Government of Zambia.

176.6. The Kabwe mine was economically immaterial in the context of ZCCM's sprawling interests. It was in any event destined for closure.[147]

177. In the context of political changes in Zambia in the early 1990s, the government became desirous to privatise the copper interests of ZCCM. Kabwe had, by that time, long been destined for closure and it actually closed down in 1994 – before any privatisation. In that context Mr Holmes explained that Anglo's involvement in Zambia during the ten years between 1991 and 2001 concerned itself with the ongoing rapid decline in the performance of the copper mines; endeavouring to advise on the complicated privatisation process, and in studying and negotiating whether and how Anglo might potentially re-invest in the Zambian copper mining industry.[148]

178. It is in this context that Mr Holmes gave a speech on 15 March 1995 – after the closure of Kabwe Mine – in which he explained "that after 1974 Anglo 'have attempted to play a constructive role as a minority shareholder', and that more recently had seen the establishment of a much closer and more productive

[147] Anglo's FA in strike-out application para 139 pp 006-60 to 006-61; Holmes first affidavit pp 001-7103 to 001-7105; Holmes second affidavit pp 006-103 to 006-110.

[148] Holmes second affidavit para 10 p 006-106.

relationship with the current management of ZCCM".[149] The phraseology is telling: a constructive role could only be "attempted" until, more recently (since 1991), political changes had made a closer and more productive relationship possible. This "more productive" relationship stemmed from Anglo's interest in re-investing in Zambia's copper sector pursuant to the privatisation policy which had been introduced.[150]

179. Anglo was never involved in the privatisation of Kabwe, which caused major additional lead pollution – as explained below. While it briefly invested in copper interests, Anglo disinvested from Zambia entirely in 2002, twenty years ago.[151]

1994 to the present

180. This period is dealt with in detail in section four, which addresses the issue of causation.

181. After closure of the Mine in 1994, ZCCM was incontrovertibly responsible to rehabilitate and remediate the Mine and its surrounds. In accordance with Zambian legislation enacted in 2000, ZCCM retained all historical liabilities relating to the Mine, held the legal responsibility to address the environmental and health impacts on Kabwe residents, and became responsible for the remediation and rehabilitation of the Mine.[152]

182. By the closure of the Mine, and in view of the obvious damage to the surrounding

[149] Holmes second affidavit para 18 pp 006-107 to 006-108.

[150] Holmes second affidavit para 19 p 006-108.

[151] AA para 956.1 p 001-3037.

[152] AA para 26 p 001-2681.

environment and community health, ZCCM had started to make plans regarding decommissioning and rehabilitation. In its 1995 Decommissioning Plan, ZCCM planned a series of common-sense interventions to deal with the legacy lead emission that would be standard in the closure plan of any lead mine and smelter.[153]

183. By the late 1990s, ZCCM had failed to implement its rehabilitation and decommissioning plans in vital respects. Its failures persist to this day.

184. Not only did ZCCM fail to rehabilitate and remediate, however, but it positively made the situation worse by *inter alia* taking the following steps:

184.1. It sold thousands of ZCCM-owned township houses located on contaminated soil to employees and others, well-knowing that they were not suitable for residential accommodation and put children at risk, and that the safer environmental solution was to demolish the houses and replace the contaminated topsoil.[154]

184.2. Instead of taking adequate steps to remove the source of lead contamination in the soil in areas surrounding the Mine, it replaced some soil in a limited number of houses with soil from a contaminated source.[155]

184.3. It “privatised” areas of the plant and surrounds, permitting third parties to

[153] AA paras 180 to 181 pp 001-2733 to 001-2735.

[154] AA paras 254 to 274 pp 001-2761 to 001-2769.

[155] AA para 23 p 001-2680.

use it in irresponsible and reckless ways, including as residential accommodation.[156]

184.4. It issued new licenses to third parties to process waste dumps, which effectively sterilised the tailings from remediation.[157]

184.5. It did not restrict access to the Mine and its surrounds, and permitted large scale artisanal mining to take place.

185. Despite ZCCM's failures, on 1 November 1996 the Zambian Mines Development Department issued an abandonment certificate to ZCCM in respect of Kabwe.[158]

186. By the late 1990s, the World Bank together with the Zambian government devised a plan (the World Bank Copperbelt Environment Project ("Copperbelt Project")) to deal with ZCCM's historical environmental liabilities. Its aims were closely coupled with the Zambian government's World Bank sponsored privatisation drive.

187. In tandem with the privatisation drive, the Zambian government decided that ZCCM would continue to exist only as an investment company, which would hold between 10% and 20% of the shares in its (previous but now privatised) mining interests. Accordingly, ZCCM's name was changed to ZCCM-IH. Today ZCCM-IH is an entity listed on the Lusaka and London Stock Exchanges and Euronext. In addition to being an investment holding company, ZCCM-IH was liable to

[156] AA paras 315 to 322 pp 001-2786 to 001-2789.

[157] AA paras 531 to 532 p 001-2857.

[158] AA para 325 p 001-2789.

retain and manage environmental issues of closed operations.[159]

188. Between 2003 and 2011, the Copperbelt Project carried out work to try and address some of the environmental health risks. However, the remediation measures undertaken in the villages themselves, in terms of soil replacement and re-vegetation, were extremely limited.[160]

189. The inadequate implementation of the Copperbelt Project had brought about no lasting or overall reduction in BLLs of young children in areas surrounding the Mine. The main reason is that fugitive dust continued to emanate from the mine dumps; inadequate soil replacement had taken place; the canal continued to be lead-polluted; adequate monitoring and treatment no longer occurred and artisanal and other mining on the former Mine area continued unabated.[161]

190. In recognition of these failures, in 2016 the World Bank (again with the assistance of local actors) devised the Zambian Mining and Environmental Remediation Improvement Project ("ZMERIP"). The project was supposed to have commenced in around 2019. To date, its achievements have been extremely modest. The negative conditions which existed when ZMERIP was devised in 2016 still prevail today.[162]

191. At present, unregulated artisanal mining and smelting in the contaminated areas continue unabated and new houses are being erected in contaminated areas.

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[159] AA para 388 p 001-2806.

[160] FA para 80.5 p 001-49.

[161] AA para 188 pp 001-2737 to 001-2738.

[162] AA para 190 p 001-2738.

The waste dumps are virtually uncovered, so that airborne dust creates high levels of lead emissions. The canal continues to convey contaminated effluent from the waste dumps and plant site to downstream communities.[163]

192. At all relevant times, ZCCM was acutely aware of its responsibility to clean up this legacy, as well as its health consequences for the surrounding community. It was also aware that it would be legally liable if any complainant brought a legal claim against it in relation to lead poisoning. It acknowledged that "it would be most logical to settle the matter out of court".[164]

193. Despite the merits of such a claim against ZCCM (and the Zambian government) being clear, the applicants prefer not to litigate against the company which is – on any basis – the only wrongdoer. There is no indication that they have even issued a demand against these entities, or taken any steps against them.

194. It is not that the applicants are unaware of the obvious obligations of ZCCM and the Zambian government to address their plight: On 5 April 2020, before this application was instituted, the applicants' medical experts had directed a letter to the Zambian Minister for Health and local medical authorities in Kabwe. In it, they expressed their significant concern at the adverse effects of lead observed in the class representatives and requested urgent action and medical, environmental and educational intervention to address the situation in Kabwe.[165]

195. This letter was not attached to the founding papers, as one would expect, but

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[163] AA paras 182 to 183 pp 001-2735 to 001-2736.

[164] AA para 241 p 001-2757 and para 244 p 001-2758.

[165] AA para 195 pp 001-2739 to 001-2740.

was furnished to Anglo's attorneys for the first time on 14 June 2021 – long after the application was instituted. In response to a question from Anglo's attorneys, the applicants' attorneys confirmed that there had not even been an attempt (ever) to contact ZCCM.[166]

Conclusion

196. Anglo was involved in the Mine as an investor and technical advisor for less than fifty years, between 1925 and 1974 – a period ending 48 years ago. ZCCM (through seamless corporate changes) was the owner and operator of the Mine from 1905 to 1994. ZCCM explicitly assumed and retained all liability for harm to the environment and the community, including through legislation passed in Zambia.

197. The Zambian government assumed control of the Mine through nationalisation in 1971 and terminated all advisory ties with subsidiaries of the Anglo Group in 1974. After that, ZCCM ran down the Mine, by its own admission, and by failing to invest in skills and maintenance. It operated the smelter plant without adequate (and for the greater part without any) emissions control from at least 1985 to 1994. During this period, all measures of lead pollution, including community blood lead levels, skyrocketed.

198. Upon closure of the Mine in 1994, ZCCM devised reasonable remediation plans with outside assistance but deliberately chose not to implement them, in favour of selling off the land and the assets to private investors. It sold its contaminated

[166] AA para 196 p 001-2740.

housing stock to the community, despite knowing that the houses should be demolished. While retaining the liability and obligation to remediate, it permitted encroachment on the contaminated land both for new housing as well as for artisanal mining and smelting activities.

199. Until the present day, ZCCM has failed to effectively carry out further remediation plans devised by the World Bank, with the help of the Zambian government.

200. Despite this, the applicants look to Anglo – an entity far removed in every possible sense from current circumstances in Kabwe – to compensate prospective class members, almost all of whom who would have been born long after the Mine had closed. The wrongdoer solely responsible for current injuries suffered from lead exposure in Kabwe is ZCCM, and it has acknowledged that it would need to settle any legal cases brought against it. Yet, the applicants prefer a case based on hindsight bias and far-fetched conjecture against Anglo to an open-and-shut case against ZCCM.

201. In what follows, we show why each element of the case theory against Anglo is fatally flawed and why this Court should thus consequently decline to certify the class action.

SECTION TWO: KNOWLEDGE AND DUTY OF CARE

Relevant legal principles

202. The applicants have tirelessly beaten the drum on what the Mine – and according to them, Anglo – knew (or ought to have known) and how they ought to have conducted the Mine's affairs:

    202.1. Importantly, they lose from sight that Anglo (as opposed to the Mine) could only have known circumstances on the ground in Kabwe, if advised of those circumstances by the Mine.

    202.2. Further, they lose sight of the fact that until the 1970s the Mine only knew of the harm that lead exposure may cause to workers – a risk of harm that was actively and punctiliously managed and mitigated by the Mine, because at the time it was nothing more than an ordinary occupational health issue.

203. The applicants beat this drum, because they are alive to the fact that knowledge (and consequently foreseeability) is an indispensable requirement of the tort of negligence.[167]

204. And while the question of foreseeability may be fact-bound,[168] the trial court will not be furnished with any better facts than those already produced through the historical documents that the applicants have exhaustively relied upon.

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[167] *Attorney General v Mwanza and Another* [2017] ZMSC 140 at pp 1378-9.

[168] Id.

205. But the applicants' case on the Mine's (and thus, in their minds, Anglo's) knowledge fatally suffers from hindsight bias.

206. In *Muir*, the House of Lords cautioned against hindsight:

> "The court must be careful to place itself in the position of the person charged with the duty and to consider what he or she should have reasonably anticipated as a natural and probable consequence of neglect, and not to give undue weight to the fact that a distressing accident has happened, or that witnesses are prone to express regret, *ex post facto*, that they did not take some step which it is now realised would definitely have prevented the accident."[169]

207. Similarly, *Roe*[170] – a case referred to with approval by the Zambian Supreme Court[171] – cautioned against employing today's spectacles to yesterday's events.

208. In *Roe*, disinfectant in which ampoules of anaesthetic were stored had seeped into the ampoules through invisible cracks. The possibility that this might occur was not generally known at the time of the incident, which occurred in 1947. The claimants, who received spinal injections of the anaesthetic, became paralysed. The hospital authorities were sued, but held not liable, because the risk to the claimants was not reasonably foreseeable at that date.

209. Lord Justice Denning held in *Roe* that "[we] must not look at the 1947 accident with 1954 spectacles".[172] The conduct of the doctors was consequently judged

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[169] *Glasgow Corp v Muir* [1943] A.C. 448 at 454, per Lord Thankerton.

[170] *Roe v Minister of Health* [1954] 2 Q.B. 66.

[171] *Attorney General v Mwanza and Another* [2017] ZMSC 140 at pp 1372 and 1379.

[172] *Roe v Minister of Health* [1954] 2 Q.B. 66 at 84.

according to what reasonable doctors would have foreseen in 1947 – at the time of the incident.[173]

210. Thus, in *Thompson*[174] it was held that where there had long been a general practice of inaction regarding the possibility of deafness through industrial noise, the defendants were only liable for failure to take steps once there was awareness of the danger and protective equipment had become available. For this purpose, 1963 was adopted as the operative date, and the claimants were held not to be entitled to damages for impairment of hearing sustained before 1963.[175]

211. The legal test, therefore, is the actual or constructive knowledge at the time which a reasonable and prudent defendant would have had if he consulted such literature or made such inquiries as were reasonably expected of him.[176] In this case, the applicants must show such knowledge or constructive knowledge on the part of Anglo – not the Mine – in circumstances where Anglo was entirely reliant on the Mine for information regarding the Kabwe community. Such knowledge is circumscribed by what was actually known at the time and what could be inferred about what ought to have been known at the time. It is impermissible for a Court to apply present day spectacles to assessing what was known or ought to have been known at the time.

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[173] *Clerk & Lindsell on Torts* (23rd Ed) at 7-174.

[174] *Thompson v Smiths Shiprepairers (North Shields) Ltd* [1984] Q.B. 405.

[175] *Clerk & Lindsell on Torts* (23rd Ed) at 7-194.

[176] *Clerk & Lindsell on Torts* (23rd Ed) at 7-174.

No triable case of knowledge of future harm to the Kabwe community

212. The applicants have attempted, but failed, to establish a *prima facie* case that the Mine, and separately Anglo, owed a duty of care to members of the proposed classes. They advance their argument on Anglo's duty of care on the false premise that certain historical documents demonstrate that Anglo knew or ought to have known of the harms which the current community would suffer from. They do so, in important respects, by simply inferring Anglo's knowledge of the document (and its contents) from the fact that the document exists or was created by the Mine. This is not permissible, even on a *prima facie* basis.

213. However, the applicants' reliance on these historical documents from which it asks this Court to draw an inference of Anglo's knowledge is misplaced. A plain reading of those documents (which will not get any better at trial because of the absence of witnesses who were around during that period) does not bear out the applicants' narrative.

214. To establish that Anglo owed a duty of care 50 years and more ago to the proposed class members currently living in the Kabwe district, this Court must find that between almost 100 and nearly 50 years ago, Anglo knew that the current community, not the historical community, would suffer harm from lead released into the environment by the Mine during its operations from 1925 to 1974. The applicants must obviously accept that Anglo can only be liable if it bore a duty of care to the current class members.

215. This is an important distinction with those cases – *Margereson*[177] and *Young*[178] – that the applicants cite. In those cases, the Court found asbestos mines liable for harm suffered by community members. Those cases concerned persons living in the vicinity of the relevant mines while the defendant was operating the mine concerned. Those cases did not involve current, present-day residents around the asbestos mines.

216. In this case, however, the applicants seek to establish a duty of care generations into the future; a feature of their case for which they quote no precedent. The lack of precedent is indicative of the difficulties, for obvious reasons, of establishing a duty of care to those whose very existence is as yet unknown.

217. For these reasons, this is emphatically not a case like *Vedanta*[179], or *Okpabi*[180], on which the applicants rely to argue that mining concerns generally owe a duty of care to communities surrounding their subsidiaries' mines. It is much more akin to the case of *Cambridge Water Co*, in which the plaintiff sought to hold the defendant (Eastern Counties Leather or ECL) liable in negligence and nuisance for spillages of PCE solvent in 1976 which, in 1991 (only some 15 years later), caused damage to an aquafer. In that case the House of Lords (per Lord Goff) held:

> "But it by no means follows that the defendant should be held liable for damage of a type which he could not reasonably foresee; and the development of the law of negligence in the past 60 years points strongly

[177] *Margereson v JW Roberts* [1996] Env LR 304.

[178] *CSR v Young* 1998 16 NSWCCR 56 2260.

[179] *Vedanta Resources PLC and another v Lungowe and others* [2019] UKSC 20.

[180] *Okpabi v Royal Dutch Shell PLC* [2021] UKSC 3.

> towards a requirement that such foreseeability should be a prerequisite of liability in damages for nuisance, as it is of liability in negligence."[181]

218. Lord Goff also indicated that neither the common law nor statutory law would hold a "historic polluter" liable for damage done before relevant legislation controlling the pollutant came into force:

> "I wish to add that the present case may be regarded as one of what is nowadays called historic pollution, in the sense that the relevant occurrence (the seepage of PCE through the floor of ECL's premises) took place before the relevant legislation came into force; and it appears that, under the current philosophy, it is not envisaged that statutory liability should be imposed for historic pollution… If so, it would be strange if liability for such pollution were to arise under a principle of common law."[182]

219. Similarly, in *Savage*, because it would not have been foreseeable in 1991 that the creation of nitrates in the ground by the application of pig manure would pollute the plaintiff's water supply in the future, no liability in nuisance was found (in 2000).[183]

220. The applicants' case thus do not raise a triable issue in law: Their own pleadings do not reveal a cause of action, because there is no precedent for a duty of care to future generations in cases of historical pollution. The existing precedents point against it.

221. In what follows, we highlight the applicants' pleaded case which conflates the Mine's and Anglo's asserted knowledge of the harm to the proposed class

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[181] *Cambridge Water Co Ltd v Eastern Counties Leather Plc* [1994] 2 AC 264.

[182] *Cambridge Water Co Ltd v Eastern Counties Leather Plc* [1994] 2 AC 264 at 307C-D.

[183] *Savage v Fairclough* [2000] Env. L.R. 183.

members; the evidence sought to be relied upon by the applicants to sustain their pleaded case; and the misplaced reliance on isolated historical documentary evidence – which does not bear out the applicants' case.

The pleaded case

222. The applicants' draft POC sets out the facts which the applicants believe are necessary to sustain the allegation that Anglo owed the proposed classes a duty of care. The applicants plead that the defendant's duty of care arose from "*the knowledge of the lead pollution risks caused by the mine's operations as set out in paragraph 42 to 44 above*".[184]

223. These paragraphs set out the specifics of what Anglo is alleged to have known:[185]

    223.1. First, "during the relevant period, [Anglo] knew or ought reasonably to have known of the general risks of lead pollution" (emphasis added);

    223.2. Second, "during the relevant period, [Anglo] further knew or ought reasonably to have known of the risks of lead pollution from the Mine operations" (emphasis added);

    223.3. Third, "during the relevant period, [Anglo] further knew or ought reasonably to have known of the risks to future generations, living in the Kabwe District" (emphasis added).

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[184] Draft POC para 48 pp 001-176.

[185] Draft POC paras 42-44, pp 001-168 to 001-171.

224. The applicants' averments regarding knowledge in its founding affidavit are divided into three parts. These three parts mirror the draft POC as follows:

224.1. Knowledge of the risks of lead exposure;[186]

224.2. Knowledge of the specific risks of lead pollution in Kabwe;[187] and

224.3. Knowledge of the risk to future generations.[188]

225. The applicants therefore rely on historical knowledge relating to the harm of lead which emanated from the Mine – from which they ask the Court to infer that Anglo ought to have had knowledge of harm to members of future generations, being the current proposed classes.

226. The applicants' case should be tested as follows:

226.1. First, have the applicants made out a *prima facie* case that Anglo (as opposed to the Mine) had knowledge of harm to the historical community? If the applicants cannot establish that Anglo had knowledge of harm to the historical Kabwe community, then *a fortiori*, the applicants cannot even begin to assert that Anglo had knowledge of harm to the current Kabwe community.

226.2. Second, even if the first enquiry is established in the affirmative, have the applicants made out a *prima facie* case that Anglo had knowledge of

[186] FA paras 136 to 155 pp 001-70 to 001-81; Draft POC para 42 p 001-169.

[187] FA paras 156 to 183 pp 001-82 to 001-93; Draft POC para 43 p 001-170.

[188] FA paras 184 to 188 pp 001-93 to 001-95; Draft POC para 44 p 001-171.

harm to the current Kabwe community? A high-level and broad strokes approach as adopted by the applicants is unhelpful. The applicants will need to demonstrate that the historical documents that they rely upon supports their case that Anglo had knowledge of harm to the current Kabwe community.

227. We demonstrate that the applicants have failed in respect of both enquiries.

Evidence relied upon by the applicants

228. The founding affidavit contains two sections on the historical knowledge of the risk of harm of lead pollution.

229. The applicants assert that between 1925 and 1974, Anglo knew of the general risk of harm of lead pollution. However, their assertion of Anglo's general knowledge exceeds the general knowledge of the time. In this regard, the applicants have asserted that:

229.1. the harmful effects of lead (without qualification or specification) have been known for approximately 2 000 years;

229.2. exposure to lead causes severe harm, which according to the applicants include developmental disabilities, anaemia, organ damage, brain damage and death;

229.3. children and women of child-bearing age are at particular risk of harm from lead exposure;

229.4. lead mining posed a risk to surrounding communities and these risks had

already been extensively investigated and documented. The applicants make reference to the 1893 Report of the New South Wales Commission of Inquiry into Lead Poisoning at Broken Hill Mine in Australia ("the 1893 Australian Report"),[189] the 1925 South Australian Royal Commission Report on Plumbism,[190] and a 1933 report on lead poisoning at Mount Isa in Queensland, Australia.[191]

230. From a plain reading of the historical documents, the applicants' allegations are unsustainable.

1893 Australian Report and other similar documents

231. The applicants place great reliance on the 1893 Australian Report as proof of Anglo's knowledge of the harm of lead and more specifically knowledge of harm to the historical Kabwe community.

232. The applicants, however, do not produce any evidence that the 1893 Australian Report came to the attention of Anglo at any point (including between 1925 and 1974).[192] Anglo was only established in 1917. The applicants do not explain how

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[189] FA para 140 p 001-71.

[190] FA para 144 p 001-75.

[191] FA para 146 p 001-77.

[192] All that the applicants put up is an unpublished academic thesis by Ms Buzandi Mufinda which references correspondence from 1916 and 1917 described as:

- "ZCCM, 19.5.1F. Correspondence between FR Godfrey (Inspector of Mines, New South Wales) and R Macartney, 19 October 1916"
- "ZCCM, 19.5.1F. Rhodesia Broken Hill Development Company Limited Confidential Correspondence Letters, Correspondence between D Meredith of Broken Hill North Mine of Australia and R Macartney, Rhodesia Broken Hill Mine Manager, 5 April 1917" (p 001-1047).

See also, FA para 142 p 001-74; and RA para 44 p 001-7607 to 001-7608.

an entity, established 24 years after the 1893 Australian Report was published, located in a different country and on a different continent, and in an age of rudimentary communication technology, came to know of this obscure Report.[193] This is because there is no evidence to suggest that Anglo knew of this Report.

233. In these circumstances, it cannot be suggested that the applicants have *prima facie* evidence to show that Anglo had knowledge of the harms set out in the 1893 Australian Report.

234. But even if the 1893 Australian Report came to the attention of Anglo (or, for that matter, the Mine), a plain reading of the whole document (not just the select parts quoted by the applicants) reveal that the applicants have exaggerated the purport and effect of this report to advance their narrative.

235. The applicants' central thesis regarding the 1893 Australian Report is that it demonstrates knowledge that Anglo ought to have had about the "general population" in Kabwe – because the board responsible for the 1893 Australian Report pointed to the "general population" in Willyama as being injured by lead fumes from the smelters at Broken Hill, Australia.[194]

236. The applicants quote large portions of the conclusionary paragraph 12 of the 1893 Australian Report and begin and end such quote with various underlined portions.[195] Their selective quotation however overlooks the entirety of the

[193] AA para 1105 p 001-3078.

[194] FA para 140.8 p 001-73.

[195] FA para 140.8 to 140.9 p 001-73 to 001-74.

conclusion and the recommendations of the board.

237. The 1893 Australian Report explains, by way of background, that the town of Willyama which had gathered around the Broken Hill mine in Australia had a municipal boundary of 12 square miles. The town was divided into the north and south with a population of approximately 22 500 people. Only 5 000 people lived in the south town. The wind came from a southerly direction and therefore it was the population of the north town who were exposed to the fumes which came from the smelter stacks.[196]

238. The report then describes the different types of emissions from the smelter stacks with which it is concerned:

> "The loss from the twenty eight smelters … thus suffered in the form of 'smoke' was calculated to contain a quantity of metallic lead and silver in excess of fifteen tons weight of metal every twenty-four hours … This for the most part is an exceedingly attenuated and light form, which floats away to great distance, but another part consists of sensible particles which are heavy, and which are deposited at a distance from the stack from which they have issued … Those two constituent[s] of the 'smoke' are distinguished as fume and flue-dust" (emphasis added).[197]

239. Therefore, there is a distinction between fumes and flue-dust: the former floats away and the latter sinks to the ground close to the smelter.

240. The report identifies, in paragraph 12 the "important question whether, the

[196] Annexure ZMX2 para 2 p 001-206.

[197] Annexure ZMX2 para 9 p 001-210.

general public health was injuriously affected by the smelting operations"[198] (emphasis added). Before answering this question, it summarises the "data" presented to the board and found that for persons who lived within "600 yards of the Hill and to the leeward of the smelters in relation to the prevalent winds, it was shown by medical evidence that leading occurred" (emphasis added).[199]

241. In other words, it was found that those who lived downwind and within 548 m of the mine were injured by lead. Further, children drawn from this same area, probably "three quarters of a mile from the Hill" all had a "pallid appearance" due to the lead fumes bearing down on the streets in which they lived.[200]

242. The report concluded that:

> "From these data we conclude that the fumes are injurious to the general population, and after considering all the circumstances, it seems probable that at this place the effectively poisonous part of the matters which issue from the stacks is the heavier part, or flue dust – no direct evidence having appeared to show that the fume which travels to very great distances actually exerts poisonous influence; and that the flue-dust affects man, perhaps mainly through drinking water. Hence, we are of the opinion – not that the lead-fume is innocuous, but that in the present case the task of preventing the escape of particles of flue-dust should be regarded as imperative and urgently needing to be undertaken". (Emphasis added)[201]

243. As a result, the report recommended that "[e]mission of flue-dust from smelter stacks should be, as nearly prevented as possible, and should at all events be

[198] Annexure ZMX2 para 12 pp 001-213 to 001-214.

[199] Annexure ZMX2 para 12 pp 001-213 to 001-214.

[200] Annexure ZMX2 para 12 pp 001-213 to 001-214.

[201] Annexure ZMX2 para 12 pp 001-213 to 001-214.

very greatly reduced below what is at present allowed; a time should be named within which the necessary alterations are to be made, and such time should not exceed twelve months"[202].

244. The applicants' claim that the board found that any form of lead emission is "injurious to the general population" and that the Mine (or, for that matter, Anglo) had, or ought to have had, knowledge of the harms of lead pollution to the historical Kabwe community, is wrong. The board found that the flue-dust which was settling within 600 yards of the Australian mine was responsible for "exerting poisonous influence" and the cause of harm which, in turn, required a recommendation to close the drinking water reservoirs in which the flue-dust was landing and ensuring piped water supplies.[203]

245. The board's findings are therefore more nuanced than the applicants care to explain. But the nuance means that, even were it to be assumed that the Mine (or, for that matter, Anglo) had seen the 1893 Australian Report, the only knowledge that could be gleaned from it is that:

245.1. potential harm to residents living close to a lead mine can be eliminated by preventing flue-dust and closing open drinking water reservoirs; and

245.2. there is no evidence that fumes which are dispersed through the stacks cause harm to the general population.[204]

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[202] Annexure ZMX2 recommendation 8 (page 26) pp 001-223.

[203] Annexure ZMX2 pp 001-222.

[204] The distinction between fumes and flue-dust is that fumes float away and the flue-dust sinks to the ground close to the smelter.

246. This is a far cry from the extent of knowledge that the applicants argue should be imputed to Anglo, arising from the 1893 Australian Report.

247. The 1893 Australian Report also did not single out children and women of child-bearing age as particularly susceptible to harm from smelter emissions. None of the data which the board relied upon included evidence on women of child-bearing age. Children in three schools were surveyed and, as mentioned above, the children at the Central school (downwind of, and closest to, the mine) were found to be generally "pallid [in] appearance". Nowhere in the report is there reference to children and women of child-bearing age as being particularly susceptible to lead injury or specific types of lead injury. This is most strikingly evident in the report's recommendations where the second recommendation is that:

> "It should be illegal to employ any boy below the age of 16 years under ground at any mine where lead-containing minerals are got; to employ any such boy on the surface in any place where lead-ores, lead, or lead-compounds are handled, to employ any boy below the age of 14 years."[205]

248. This recommendation makes it clear that the board was satisfied that children over the ages of 14 and 16 were still being employed to work in parts of the Australian lead mine – and that this was considered not to be a public health issue. This recommendation could hardly have been made were there to have been knowledge of the children's particular susceptibility to harm from lead smelter emissions. The applicants are plainly wrong when they aver in their founding affidavit that "by definition, children would not have been subject to

[205] Annexure ZMX2 page 24 p 001-221.

occupational lead exposure".[206] Children were clearly working on lead mines in the late 19th century. Further, the applicants exaggerate the interpretation of the 1893 Australian Report when they suggest that "in light of the knowledge gleaned from the 1893 Broken Hill (NSW) experience explained above, Anglo would, or ought to, have been aware that children were at risk of environmental lead poisoning".[207]

249. Consequently, it cannot be argued that knowledge of the 1893 Australian Report equates to knowledge of the risk of harm to the historical Kabwe community. The 1893 Australian Report sent a message that, if flue-dust is prevented from escaping and open drinking water reservoirs are closed, this will eliminate the risk of harm to those living in close proximity to the Australian mine. Further the communities surrounding the mine, beyond 600 yards (548 m) north, were not considered to be at risk of harm.

250. A similar exercise may be undertaken with the other historical documents that the applicants rely upon in support of their proposition that Anglo and the Mine had general knowledge of the harms of lead pollution to communities neighbouring the Mine:

Annexure	**Document**	**Findings on / concerned with effects of lead exposure in-plant**	**Findings on / concerned with effects of lead exposure on the general population around the**

[206] FA para 149 pp 001-78.

[207] FA para 149 p 001-178.

			Mine
ZMX59	1925 South Australian Royal Commission Report on Plumbism	Yes	No[208]
ZMX60	1933 Report on lead exposure at Mount Isa in Queensland	Yes	No[209]
FA, para 148	Laws passed by European nations to protect against harmful effects of lead (Factory and Workshop (Prevention of Lead Poisoning) Act 1883 etc.	Yes	No

251. As appears from these documents:

251.1. The laws passed by "various European nations" were to deal with the harms of lead as a serious occupational or industrial disease. That was the general knowledge of the harms of lead at the time.[210]

251.2. The successive investigations done in Australia, following the 1893 Australian Report, only dealt with the harms of lead as an occupational risk to workers, and not a risk to the communities living around lead mines.

[208] The applicants accept this and aver that "the report was focused on occupation exposure to lead dust and fumes" (FA para 144.1 p 001-75).

[209] The applicants accept this and aver that the "report focused on the risks of occupational exposure to lead in the lead mining and smelting industries".

[210] AA para 635 p 001-2900.

251.2.1. The 1925 South Australian Royal Commission Report on Plumbism only investigated occupational risk of lead exposure in the town of Port Pirie. The applicants candidly concede that in this report no efforts were made to investigate the air, water and soil in the surrounding community.[211]

251.2.2. The 1933 Report on lead poisoning at Mount Isa Queensland Australia also only focused on the risks of occupational exposure to lead in the mining and smelting industries.[212]

252. It is uncontroverted that, before the late 1960s and early 1970s, there was no knowledge about the harms of lead pollution to the general population surrounding lead mines. As Anglo's expert Mr George explains:

> "Even in the USA, it was not until the 1970's that the full impact of lead exposure on the public was brought into clarity. This late recognition of lead as a serious environmental problem was not driven by lead from lead smelters but lead from tetraethyl lead in gasoline (only banned in the USA in 1990 and in parts of Africa in 2005) and lead in paint. These were the triggers for the current lead emission and environmental standards. The Mine cannot be faulted for failing to recognize this trend decades before others" (emphasis added).[213]

253. The applicants do not meaningfully respond to the underlined portion of this quote. In reply they simply state that "given the scale and intensity of in-plant lead pollution and its proximity to the communities, Anglo ought to have known

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[211] AA para 636 pp 001-2900 to 001-2901.

[212] AA para 636.2 p 001-2901.

[213] AA para 653.2 p 001-2906; Annexure AA8 para 6.6 p 001-3398.

or suspected that there was wider contamination in the surrounding community. In other words, it is implausible that Anglo knew about the dangers of worker exposure to lead but had no cause to investigate to wider environmental problem".[214]

254. We submit that plausibility plays no role. Either Anglo had knowledge of harm to the neighbouring community, or it did not.

255. The applicants have not even shown that the Mine had such knowledge, and they also did not show why the Mine should have known better (or more) than the rest of the world did before the 1970s. In particular, they do not show why the Mine should have known better or more than the operators of the ISF at Avonmouth, a smaller but improved version of which was erected at Kabwe, in circumstances where:

> "The Avonmouth lead-zinc smelter was the world's largest when it opened and had the capacity to produce 45 000 tons of lead per annum. The Kabwe lead-zinc smelter at its peak produced half the tons of lead per annum that were produced at Avonmouth."[215]

256. The applicants then go further (despite this lacuna) and then try to assert, without any basis, that not only did the Mine have this knowledge, but that Anglo must have had the knowledge. They impermissibly ask the Court to infer that they did. However, that inference cannot be drawn from a plain reading of the documents relied upon.

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[214] RA para 566 p 001-7787. Prof Betterton does not respond to this averment in Mr George's report (see: Betterton report para 12.2 to 12.32 pp 001- 9625 to 001-9638.

[215] AA para 148 p 001-2722 quoting Harrison first report para 5 p 001-2649.

257. In relying upon these documents, the applicants have failed to make out a *prima facie* case that Anglo had knowledge about the harms of lead pollution to the historical Kabwe community, let alone the present Kabwe community.

Routledge Farm

258. The applicants assert that between 1925 and 1974 Anglo knew of the risks of lead pollution from the Kabwe Mine operations.

259. In essence this part of the draft POC relates to Anglo's alleged knowledge of the specific harm that lead caused to the historical Kabwe community. The applicants say that Anglo's knowledge of the risks of lead pollution from the Mine included the following:

    259.1. prevailing winds carried lead pollution from the Mine to surrounding communities;

    259.2. lead pollution accumulated in the soil, vegetation, crops, and animals in the Kabwe District;

    259.3. lead pollution entered the water courses surrounding the Mine;

    259.4. lead pollution from the Mine caused harm to residents of Kabwe, including women and children of child-bearing age.[216]

260. Again, the applicants rely on a number of historical documents, attached to their

[216] Draft POC para 43 p 001-169.

founding affidavit, in support of the above averments.

261. None of the applicants' historical documents showed that Anglo (or, for that matter, the Mine) knew that the prevailing winds were carrying lead to the historical communities; knew that the lead pollution was accumulating in soil, vegetation, crops and animals; or knew that lead pollution was entering the water courses surrounding the Mine.

262. Further, and noticeably, neither the applicants' founding affidavit, nor the attached documents, contain anything which suggest that Anglo (or, for that matter, the Mine) during the relevant period knew of the risk of lead pollution to the current Kabwe community.

263. Upon realising the deficiencies in their case, the applicants have impermissibly attempted to bolster their case on this issue in reply.

264. They aver that "Anglo's knowledge of the wider impacts of its activities are further demonstrated by a series of documents further demonstrating water and soil contamination on the Rutledge Farm, to the south east of the Mine site."[217]

265. Leaving aside the fact that the so-called series of documents is a mere five pages and that the applicants' have misused this evidence by interpreting it to make scurrilous attacks on Anglo, the evidence does not support the applicants' case that the Mine (or, for that matter, Anglo) had knowledge of the harms of lead exposure to the historical community living in the Kabwe District. On the applicants' own version, the evidence shows that two tailings dam breaks caused

[217] RA para 66 p 001-7615.

damage to fish, livestock and crops.[218]

266. This is far short of demonstrating that the Mine or Anglo knew that emissions from the smelters were reaching the entire Kabwe District and causing the historical community harm. These five pages make no reference to lead pollution and are in any event irrelevant to the applicants' theory of how lead pollution in the historical communities of Kabwe came about, namely through the air-borne emissions from the Mine's stacks being dispersed by the prevailing winds.[219]

267. There is also no evidence, on the face of these documents or otherwise, that they came to Anglo's attention.[220]

268. There is, therefore, no evidence which even suggests that Anglo had specific knowledge of the harms of lead pollution to the historical Kabwe community before the early 1970s. It was only in 1975, a year after the relevant period, when Dr Clark published his thesis on the effects of lead pollution on children living in Kasanda, Makululu and Chowa that the harms of lead to the children in these townships became publicly known. Before 1975, the Mine had knowledge on the health of adult workers whom they understood were being exposed to lead emissions as part of their work at the Mine – exposure which the Mine took constant and punctilious efforts to address.[221]

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[218] RA paras 66 to 67 p 001-7615.

[219] FA in Anglo's strike-out application para 74 p 006-32.

[220] FA in Anglo's strike-out application para 74 p 006-32.

[221] AA paras 1132 to 1172 pp 001-3084 to 001-3098.

Dr van Blommenstein

269. The applicants place strong reliance upon a memorandum allegedly drafted by Dr van Blommenstein.[222] However, Dr van Blommenstein's memorandum does not have the applicants' desired effect. That memorandum sought to flag the levels of lead which workers at the Kabwe plant were being exposed to, as a result of which the memorandum made various recommendations to reduce worker exposure to lead inhalation and ingestion.[223]

270. What the applicants omit is that the Mine responded to Dr van Blommenstein's recommendations and subsequently installed an experimental vacuum system, a dust collection system and a dust counting laboratory.[224]

271. The applicants argue that while Dr van Blommenstein "only expressed concern for employees of the Mine, the risks to the wider community must have been reasonably foreseeable".[225] But this again is mere assertion. While the applicants acknowledge the fact that they have no evidence that Dr van Blommenstein knew of harms to the historical Kabwe community, they impermissibly ask this Court – presiding more than half a century later – to infer that because the Mine knew of harms to workers, the Mine or Anglo ought to have known of harms to the historical Kabwe community.

272. The applicants' suggestion that this is a proper inference to make belies the

[222] FA paras 163 to 166 pp 001-83 to 001-84. Note that the last page of the memorandum is missing and there is no evidence as to whom signed this document.

[223] Annexure ZMX67 p 001-1164; Annexure ZMX68 p 001-1166.

[224] AA para 121 – 126 pp 001-2712 to 001-2714; AA paras 1139 to 1144 pp 001-3086 to 001-3088.

[225] FA para 164 p 001-84.

shortcoming in their case.

The applicants' expert reports

273. In order to overcome the difficulty highlighted above, namely that existing common-law precedent does not establish a duty of care in respect of future generations, the applicants contend that Anglo knew of the risk to future generations living in Kabwe. They plead that:

> "during the relevant period, [Anglo] further knew or ought reasonably to have known of the risk to future generations living in the Kabwe District, including that:
>
> 4.1 Lead is heavy, stable, does not easily corrode and is generally immobile once deposited in soil, with the result that, in the absence of remediation measures, lead pollution from the Mine would remain in the environment for centuries.
>
> 4.2 The town of Kabwe and residential areas would continue to grow in close proximity to the Mine;
>
> 4.3 Future generations of children and women of child-bearing age, including the class members, would be exposed to lead pollution created by the Mine operations during the relevant period;
>
> 4.4 In view of the fact that the Mine had no measures in place, alternatively, insufficient measures, to monitor lead pollution arising from the Mine operations, to prevent, minimise and/or address lead pollution and to protect residents of Kabwe from lead pollution when the Defendant and its subsidiaries ceased to manage and control the mine in 1974, it was likely that:

44.4.1 Future generations of children and women of child-bearing age, including the class members, would continue to be exposed to lead pollution created by the Mine operations after the relevant period;

44.4.2 Measures would not be taken to prevent and address this lead pollution after the end of the relevant period; and

44.4.3 Future generations, including the class members, would suffer harm from exposure to lead arising from the Mine's operations both during and after the relevant period"[226].

274. There is absolutely nothing in the founding affidavit which suggests that Anglo knew of, or should reasonably have anticipated, the harms of lead pollution 50 to 100 years in the future.

275. In relation to the applicants' averment in their draft POC that Anglo knew or ought to have known that Kabwe would grow to its current size, there is equally nothing in the founding affidavit to support this averment.

276. As a matter of principle, it is not credible to suggest that the Mine would have possibly considered the type of urbanisation and population growth that has been a feature of the early 21st century as part of its business and mining operations in Kabwe between 1925 and 1974. And, *a fortiori*, if the Mine did not have this actual or constructive knowledge, why would Anglo – half a continent away – have foreseen such growth?

[226] Draft POC para 44 pp 001-170 to 001-171.

277. It may be plausible to suggest that governments have knowledge or ought to have knowledge of urbanisation and population growth, but to suggest that a Mine or a private company did have – or should have had – similar foresight, is an unwarranted stretch.

278. In relation to the applicants' averment in the draft POC that Anglo knew or ought reasonably to have known that no measures would be taken to prevent and address the lead pollution in Kabwe for a period of almost 50 years, there is nothing in the founding affidavit to support this averment.

279. Further, Anglo's answering affidavit, particularly the section on "ZCCM's conduct between 1974 and 1994", proves the exact opposite.[227] Anglo would have reasonably expected the companies which succeeded ZBHDC to take measures to prevent and address the lead pollution in the environment. We elaborate on this in section four below.

280. The remaining averments in the draft POC are difficult to decipher. However, in sum they acknowledge that the applicants must plead that Anglo knew or ought to have known that lead remained in the environment for over 50 years and the remaining lead would cause harm to the current community. The evidence that the applicants put up in their founding affidavit to support this, is two-fold:

    280.1. First, they rely on Prof Betterton's opinion evidence; and

    280.2. Second, they rely on Prof Harrison's opinion evidence (they say they rely on Prof Thompson as well, but there are no averments in this section of

[227] AA paras 199 to 624 pp 001-2741 to 001-2897.

the founding affidavit referring to Prof Thompson or her expert report).[228]

281. It is irrelevant and accordingly inadmissible for expert witnesses to speculate on the subjective knowledge that persons had, or should have had, historically or otherwise. These issues are inferences of fact to be drawn by a Court; it is not a matter of expert opinion. It is of no assistance to the Court.[229]

282. Leaving aside the difficulties of using opinion evidence to demonstrate a *prima facie* case on subjective knowledge, the opinions on which they rely fall far short of supporting the claim that the Mine (and much less so Anglo) had knowledge that lead in the environment would remain for 50 to 100 years in the environment and cause harm to the current community.

283. The opinion of Prof Betterton on which the applicants rely is that "by 1914, the dangers of lead poisoning were widely known across the lead mining industry, as was the need to mitigate exposure".[230] This statement is broad. It does not specify the kind of harms that were then known or the remediation measures that ought to have been implemented to prevent those harms. In any event, nothing in this statement suggests that Anglo had knowledge that lead pollution remained in the environment for 50 to 100 years and as such would cause harm to future generations. The applicants have therefore not demonstrated through Prof Betterton's evidence that the Mine or Anglo knew of the long-lasting harm caused by lead in the environment.

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[228] FA para 185 p 001-93.

[229] *Gentiruco AG v Firestone SA (Pty) Ltd* 1972 (1) SA 589 (A) at 616F to 617B; *R v Vilbro* 1957 (3) SA 223 (A) at 228G-H.

[230] FA para 185 p 001-94.

284. The applicants aver as follows in relation to Prof Harrison's opinion: "once the local environment becomes contaminated with lead, this will remain in the environment. Already by the 1950s, there was substantial scientific evidence of lead's long-lasting effects" (emphasis added) – and the applicants thereafter quote a part of Prof Harrison's report to substantiate this statement.[231]

285. The quote from Prof Harrison's report, however, is only concerned with demonstrating that lead remains in the environment – there is nothing in the quote which suggest that by the 1950s it was also known that, where lead remains in the environment, it causes harm to future generations. One only has to consider the fact that clinical investigators in the 1950s and 1960s considered BLLs up to 50 and 60 µ/dL to be normal.[232] This is unsurprising, given that, in the 1950s, lead was ubiquitous in a number of environments, including those surrounding lead mines as well as in cities as a result of gasoline emissions.

286. The applicants have therefore not demonstrated through Prof Harrison's evidence that the Mine (and much less so Anglo) knew of the long-lasting risks of harm, particularly the risks of harm of lead in the environment, in 50 to 100

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[231] FA para 186 p 001-94. The quote which is relied upon by the applicants reads as follows:

> "[Lead] has long-term stability, but can disperse within the environment. A paper published in 1954 (Butler, E17) showed that lead and it differed from other metals by being enriched in surface soils, and unlike most other metals (which showed higher concentrations at depth than at the surface) was not moved downwards by percolating rainwater, a clear sign of the immobility in soil of lead entering from the atmosphere. In the 1960s and early 1970s, extensive research was conducted on lead in the environment. Studies at this time showed lead poisoning of livestock in the vicinity of lead mines (E14) and smelters (E20) and should have been well known to Anglo. Around this time, studies such as those around the Avonmouth lead zinc smelter (E10 and E21) and the Swansea Valley (E15) were revealing extensive lead contamination. It was obvious from such studies that lead had accumulated around these sources and Purves, in a paper published in 1972 (E22), commented that "contamination of soils with elements such as copper, lead and zinc appears to be largely irreversible". Purves reports an experiment in which he leached columns of contaminated soil with the equivalent of 40 metres of rainfall and these elements were not substantially reduced (E22)."

[232] Beck affidavit p 001-3538.

years.

287. Moreover, the applicants have asked one of their experts, Prof Harrison, to express an opinion on whether Anglo or the Mine ought to have had knowledge of the long-lasting harm caused by lead in the environment. Prof Harrison answers this question as follows:

> "By 1974, there were published studies showing contamination of sites where lead had been used many years before (E10, E15, E20, E21). While the precise magnitude of the lifetime of lead in soil was not known with the confidence level of the present time, there were at least strong grounds to expect that the contamination would exist for 50 years and possibly longer (E17, E22)" (emphasis added).[233]

288. Prof Harrison's opinion, which is conveniently not quoted by the applicants in their heads of argument, is telling. He states that by 1974 (not prior) "there were at least strong grounds to expect that the contamination would exist for 50 years and possibly longer". There are two aspects of his opinion that must be emphasised:

288.1. First, Prof Harrison is of the opinion that the Mine ought only to have had the requisite knowledge at the end of the relevant period; not in the 1950s as the applicants suggest in their founding affidavit.[234]

288.2. Second, the studies which he refers to in support of his opinion were studies about how lead remains in the environment. They were not

[233] Harrison affidavit para 25 p 001-2640.

[234] FA para 186 p 001-94.

studies which were concerned with demonstrating that if lead remains in the environment, it will be harmful for 50 years or more to future generations.[235]

289. Finally, it is quite remarkable that the applicants ignore their expert, Prof Taylor who states that “Anglo and the Mine” were cognisant of a) the prevailing winds; b) elevated dust levels in the atmosphere; c) the role of dust causing lead poisoning and d) the need to lower levels of exposure to its workers. He continues to say however that:

> "It does not necessarily follow that the company were mindful of the impacts that the smelter operations might also have had on the community. Nonetheless, it is without a doubt that the issue of lead rich dust on workers and the need to supress it was widespread in the industry.”[236] (Emphasis added.)

Conclusion

290. In summary:

290.1. The applicants do not establish a *prima facie* case that Anglo owed a duty of care to future generations. Such a duty of care is not supported by precedent. In fact, precedent points to the exclusion of such a duty of care in respect of “historic pollution”.

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[235] Prof Harrison cites the following studies at pp 001-2646 to 001-2647: “A survey of Zinc, Lead and Cadmium in Soil and Natural Vegetation around a Smelting Complex”, P Little, MH Martin, *Environmental Pollution*, 3 241-254 (1972); “Plants and Soils as Indicators or Metals in the Air”, GT Goodman, TM Roberts, *Nature*, 231, 287 (1971); “Lead Poisoning in Cattle and Horses in the vicinity of a Smelter” PB Hammond, AL Aronson *Annals NY Acad Sci*, 111, 595-611 (1964).

[236] Taylor first report p 001-1751.

290.2. The applicants have failed to produce evidence demonstrating that the Mine, let alone Anglo, had the requisite knowledge in relation to the harms of lead pollution to the historical Kabwe community. That being the case, the Mine and Anglo could not have had knowledge of harm to future generations. As a result, the applicants' attempt to establish a *prima facie* case on duty of care on the facts is also stillborn.

290.3. In any event, the applicants have failed to establish, on a *prima facie* basis, that the Mine, let alone Anglo, had knowledge in relation to the harms of lead pollution to future generations – namely members of the proposed classes and the current Kabwe community. They ask the Court to draw an inference from historical documents. But as we have demonstrated above, those historical documents clearly do not permit of such an inference.

290.4. Consequently, this Court can and should find that the applicants have not disclosed a triable case on Anglo's alleged duty to the proposed classes. As a result, their application for certification falls to be dismissed.

SECTION THREE: NO CASE FOR BREACH OF DUTY

Introduction

291. It is trite that a defendant will be in breach of a duty of care if its conduct falls below the standard required by the law. The standard normally set is that of a reasonable and prudent person in the prevailing circumstances.[237] This standard must be concretised to show what a defendant practically should have done to prevent the harm from occurring.

292. If the applicants have, *prima facie*, established that Anglo owed a duty of care to the members of the proposed classes – which remains denied – then we demonstrate below that the applicants have not made out a case that Anglo breached that duty. The applicants have asserted, but not established, that Anglo's conduct was unreasonable in the circumstances that prevailed over the period 1925 to 1974.

293. The applicants contend that Anglo's negligent breaches of its duty of care may be summarised under five primary heads of negligence, namely:

    293.1. The failure to investigate and monitor;

    293.2. The failure to prevent;

    293.3. The failure to cease and relocate;

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[237] *Clerk & Lindsell on Torts* (23rd Ed) at 7-158.

293.4. The failure to remediate; and

293.5. The failure to warn.[238]

294. There are several fundamental flaws apparent from the applicants' attempt to establish, even on a *prima facie* basis, that Anglo was negligent over the relevant period.

295. The first fundamental flaw is that the applicants conflate concerns expressed about in-plant hygiene for workers with external environmental lead pollution.[239] The applicants seek to infer that, because the Mine was aware of the need for in-plant hygiene, it ought to have been aware of possible lead pollution to the Mine's neighbouring communities – and then seek to make the further logical leap that Anglo should likewise have been aware.

296. The applicants' second flaw is that they misread various documents and selectively extract quotes from these documents to advance their narrative. A clear example is the so-called "Broken Hill attitude" internal memorandum introduced by the applicants in reply to shore up the deficiencies in their case on negligence.[240]

297. The applicants' third flaw is that, while they assert that Anglo acted negligently, they have failed to articulate the prevailing standard that Anglo allegedly breached. In the absence of articulating and establishing what the prevailing

[238] Applicants' HoA para 353 p 007-162.

[239] AA para 1132 p 001- 3084.

[240] RA paras 121 to 123 p 001-7632.

standard was during the relevant period, the applicants invite this Court to embark upon an impossible enquiry into whether Anglo has breached such unknown standard.[241] For this reason alone, the applicants' case is fatally deficient, and therefore does not raise a triable case.

298. Moreover, Anglo has demonstrated that the way the technology employed by the Mine evolved over the relevant period, was consistent with then international practice. This is to be contrasted with the absence of any pollution controls by the Mine prior to the relevant period. The applicants were unable meaningfully to controvert this evidence. Their attempt to do so is purely speculative, by refence to a very small handful of documents over half a century.

299. These fundamental shortcomings are apparent from the applicants' replying affidavit. In that affidavit, the applicants of necessity do an about turn on several central issues. We consequently submit that the applicants have not demonstrated a triable case on Anglo's breach of its duty.

300. Again, while we are alive to the fact that the question of breach or negligence is fact-bound, we submit that both parties' reliance on archival material generated from almost a century ago would not get any better at a trial and therefore, may and should be determined in these proceedings.

301. In what follows, we will:

    301.1. First, deal with the applicants' failure to establish the standard to which

[241] AA para 161.1.2 para p 001-2725.

it seeks to hold Anglo.

301.2. Second, deal with each of the five heads of negligence advanced by the applicants and demonstrate why they are unsustainable on the common cause facts.

301.3. Third, refer to the documents foundational to the applicants' case, which they misrepresent to advance their wholly unfounded narrative of Anglo's breach of its alleged duty of care.

301.4. Finally, reveal the convenient about turn by the applicants in reply to relieve the pinch of the shoe in their case on breach of duty.

The applicants' case on Anglo's breach of duty

302. The applicants contend that:

302.1. Anglo exercised *de facto* control and responsibility over the operations of the Mine, and held itself out as exercising such responsibility and control.[242]

302.2. Anglo assumed specific responsibility for the control of lead pollution at the Mine and held itself out as exercising such oversight and control over measures to address lead pollution at the Mine.[243] To support this assertion, the applicants rely on the correspondence between the Mine, Anglo and Dr van Blommenstein which they say is "strong evidence" of

[242] FA para 201 p 001-101.

[243] FA para 205 p 001-102.

the degree of oversight.[244]

302.3. The Mine was dependent on Anglo for instructions and directions on the control of lead pollution and, furthermore, Anglo knew that the Mine would rely on its advice.[245]

302.4. Anglo was fully aware of the reasonable measures that ought to have been implemented to prevent and address lead pollution and that these measures were not adequately implemented at the Mine.[246] Furthermore, Anglo failed by not ensuring that it (Anglo) or the Mine took the "reasonable measures" it identifies.[247] These measures include:

302.4.1. Taking various steps to monitor lead pollution and test employees and Kabwe residents.[248]

302.4.2. Provide medical facilities and resources for the testing of residents for exposure to lead.[249]

302.4.3. Implementing measures to prevent lead pollution from escaping from the mining and blasting process alternatively, ceasing mining and blasting at the Mine.[250]

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[244] FA para 205 p 001-102.

[245] FA para 207 p 001-102.

[246] FA para 209 p 001-103.

[247] FA paras 211.3 to 211.4 p 001-103.

[248] FA paras 197.1 to 197.3 p 001-98.

[249] FA para 197.4 p 001-98.

[250] FA para 197.5 p 001-98.

302.4.4. Implementing measures to prevent lead pollution from escaping from the Mine's sinters, crushers, and smelters such as installing effective hoods and dust control systems, installing taller chimney stacks and enclosing the smelter building,[251] alternatively ceasing such operations.[252]

302.4.5. Implementing measures to prevent lead pollution from the Mine dumps alternatively ceasing the dumping of waste rock and relocating the Mine dumps.[253]

302.4.6. Relocating the residents from residential areas in close proximity to the Mine and taking steps to remediate lead pollution in the Kabwe district.[254]

302.4.7. Warning residents on measures to prevent lead pollution. Putting in place policies to ensure that lead production post-1974 proceeded safely. Warning the Zambian government and subsequent owners of the ongoing danger of lead pollution and providing funding resources and support to initiatives to prevent and remediate lead pollution in the Kabwe district.[255]

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[251] FA para 197.6 p 001-98.

[252] FA para 197.7 p 001-99.

[253] FA para 197.9 p 001-99.

[254] FA para 197.11 p 001-99.

[255] FA paras 197.13 to 197.17 pp 001-99 to 001-100.

302.5. Based on these assertions, the applicants draw the conclusion that "there is no evidence to suggest that Anglo made efforts to reduce environmental emissions, beyond the limited interventions by Dr van Blommenstein and the piecemeal efforts in the early 1970s."[256] (Emphasis added.)

302.6. The applicants contend that while there were some measures to protect workers from exposure to lead pollution, "no such concerns seem to have been extended or expressed for the health and well-being of the local communities or future generations."[257]

303. Anglo's alleged breach of its duties is pleaded in the widest possible terms to cast the widest possible net. However, as we show below, there is no evidence to support a case for a breach of these duties.

Failure to articulate the prevailing standard

304. In the tort of negligence, defendants are supposed to be judged by the reasonableness of their conduct at the time that they acted. This much is uncontroversial; the applicants' failure to adhere to this principle is fatal to their case.

305. The applicants have not set out the prevailing standard/s that Anglo was required to comply with relating to the technology that the Mine used or how the Mine allegedly deviated from those prevailing standards. Indeed, the applicants

[256] FA para 216 p 001-104.

[257] FA para 216 p 001-104.

cannot contend for any standard of emission control, because none existed at the time. Nor did the applicants attempt a quantification of lead pollution caused because of the Mine's alleged failure to comply with such standards ("guilty lead").

306. Anglo's expert, Mr George explains there has been a changing view of emission control in the smelting industry. During the relevant period, regulations in the United States and Europe dealing with lead smelters all focused on minimising worker exposure to lead and in-plant hygiene.[258]

307. In other industries, such as coal and other dirty fuels, there was considerable attention paid to reducing their impact in populated areas in Europe and the United States, mainly through increasing smokestack heights.[259] However, this did not occur in respect of lead smelters, because there was no appreciation of the harm caused by relatively low-level lead exposures to the community. Mr George explains that:

> "There were no widely recognized industry standards specifically governing the emission of lead from lead smelters for most of the 20th Century. The record is full of references to reducing workers exposure to lead but virtually none dealing with emissions of lead to the environment. Further, the early lead emission regulations have proven to be insufficient to protect public health and much more stringent regulations have succeed them…" [260]

308. In the absence of articulating and establishing what the prevailing standards

[258] George report para 2.8 p 001-3382.

[259] George report para 2.9 p 001-3383.

[260] George report para 2.15 p 001-3384.

were during the relevant period, the applicants invite this Court to embark upon an impossible enquiry into whether Anglo has breached such an unknown standard.[261]

309. The applicants' retort is that the absence of legislated standards is irrelevant to the question of whether Anglo owed a duty of care and whether it was breached.[262] But that retort misses the point. Even though there may not have been legislated standards, the applicants were required to provide evidence (not speculation by its experts) as to what would have been reasonable conduct at different stages of the relevant period. In other words: The applicants cannot be heard to be saying that zero emissions were permissible. They would have had to identify what amount of emissions were reasonable at the time, and how those were exceeded (if at all). The applicants failed to do so.

310. Their failure is fatal to their case on establishing a triable issue and consequently, fatal to their proposed class action being certified.

311. The Court is required to ensure justice to both the applicants and to Anglo. It would be unjust to subject Anglo to a case in respect of which there has been no articulated standard of conduct. All that the Court is saddled with is a description of various alleged conduct – rendering the Court's task impossible to determine whether Anglo conformed or deviated from what would have been reasonable conduct at the time.

312. The applicants cannot be excused by their constant refrain that this issue will be

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[261] AA para 161.1.2 para p 001-2725.

[262] RA paras 512.1 to 512.2 p 001-7767.

fully ventilated before a trial court:

312.1. First, the conduct complained of occurred between 98 and 47 years ago. In these proceedings, both parties have relied upon archival documents, exhaustively canvassed by both parties. This will not change even if the matter proceeds to trial.

312.2. Second, the applicants (or at least their legal representatives) have been investigating the issues surrounding the present application since 2003[263] – that is for almost two decades now. If they are now unable to articulate a standard of reasonableness that prevailed over the relevant period, they certainly will not be able to do so at a trial.

312.3. Third, it is common cause that there is no aerosol data available to quantify the dust emitted into the environment over the relevant period[264] and there will be no aerosol data available to a trial court. There is mere speculation from the applicants' experts – which we address further below. In the absence of this aerosol data, a trial court will not be able to determine the fact of whether there was a deviation from any undefined standard of "reasonableness" insofar it pertains to the emission of leaded matter.

313. Finally, one cannot sufficiently emphasise the caution against hindsight bias: What may have been considered reasonable emissions during the relevant

[263] Anglo's FA in extension application para 137.1 p 004-67.

[264] Taylor affidavit para 7.1 p 001-1764.

period may, by today's standards, be regarded as totally unreasonable.[265]

314. By failing to define the perimeters of what would have constituted reasonable conduct at the time, the applicants would impermissibly require a trial court to employ today's standards. This a trial court will not do.

315. Anglo has investigated and set out in detail how the processes employed at the Mine evolved over time in accordance with the applicable practices of the day.[266] We summarise the evolution briefly:

316. Prior to the relevant period (1916 – 1925), the Mine operated blast furnaces in open-sided building with roof vents. The furnaces were ventilated by natural draft without any fume collection equipment.[267] This, according to the applicants' expert, Prof Betterton, must have meant that the hearth emitted "prodigious amounts of lead fumes and dust into the environment".[268] The period 1916 – 1925 accounts for 12% of the total lead that was produced by the Mine.[269] The applicants now concede that relatively high emissions of lead are likely to have occurred during the time prior to the relevant period.[270]

317. The first wave of upgrades came in 1946, with the Newnam Hearth Plant, which included air emissions control technologies including bag filters and Doyle Impingers to collect dust.[271] The stack heights were also increased after 1946

[265] George report para 6.3 p 001-3396.

[266] AA para 1132.5 p 001-3085.

[267] AA para 99 p 001-2706.

[268] Betterton affidavit pp 001-1624 to 001-1625.

[269] AA para 98 p 001-2706.

[270] RA para 190.1 p 001-7664.

[271] AA para 111 p 001-2709.

with a 120 ft (37 m) tall stack. This was the first time that the lead recovery process at the Mine had an emissions control system.[272]

318. The applicants accept that the upgrades may have been capable of reducing emissions. They deny, however, that the installation of the new plant had introduced a "significant reduction" in lead fumes during this period.[273] Their unfounded denial is based on some monthly reports showing losses from the baghouses or the Doyle impingers ranging from 2% – 9%. They concede, however, that some of these lead losses could have been trapped and returned to the smelter.[274] Even if one were to accept the applicants' allegation that there were between 2% and 9% lead losses during the period of the Newnam Hearths, even those losses are – on every interpretation – a significant reduction of emissions when contrasted with the preceding period where there were no emission control systems and 100% of the lead in the fumes was lost to the atmosphere.

319. The second wave of upgrades came with the Dwight-Lloyd sintering machines, introduced in 1953. Both the sinter plant and the lead blast furnace were equipped with modern pollution control technologies. According to Mr Barlin – a contemporaneous source relied upon by both parties – dust emissions from the blast furnace were captured by an electrostatic precipitator.

320. The electrostatic precipitator used to capture furnace emissions was said, by the applicants' expert Prof Betterton, to be "highly efficient, often approaching 99%

[272] AA para 112 p 001-2710.

[273] RA para 516.1 p 001-7768.

[274] RA para 126 to 127 p 001-7634.

even for the smallest particles."[275] Realising the significance of this concession, the applicants seek to clarify, in reply, that while Prof Betterton stated the electrostatic precipitator was "capable of being 99% efficient for even the smallest particles", he did not state that it was "in fact" 99% efficient.[276]

321. The applicants make no attempt to quantify the emissions during this period, they do not tell this Court "in fact" how efficient the electrostatic precipitator was. In the absence of quantifying how efficient the precipitator then was, in fact, this does not amount to a meaningful dispute that it was 99% efficient. Notably, the "clarification" sought to be made in reply is not made by Prof Betterton in his second report.

322. The Dwight-Lloyd plant, therefore, represents significant progress to upgrade the Mine's air emission control standards in accordance with the prevailing practice of the time.

323. The third wave of upgrades was completed with the ISF in 1962.[277] Anglo's uncontested[278] evidence is that:

323.1. The ISF was "state of the art" at the time. Anglo's experts Messrs George and Sharma explain that the ISF employed an emission control system comparable to those associated with blast furnaces in the United States

[275] AA para 131.3 p 001-2716.

[276] RA para 520.3 p 001-7770; para 692.1 p 001-7821

[277] AA para 137 p 001-p 2717.

[278] RA para 524 p 001-7770. The applicants vaguely deny that the steps taken were adequate but "note" the remainder of paragraph 137 to 139 of the answering affidavit.

and Europe from the same period.[279]

323.2. The sinter plant had a 200 ft stack and an electrostatic precipitator.[280] The applicants correctly concede what their own expert in any event acknowledges, i.e. that the electrostatic precipitator "represents a reasonable air pollution control system for [emissions from the sinter plant]."[281]

323.3. The ISF (furnace) off-gasses were treated with a very efficient Theisen Disintegrator scrubber.[282]

324. Bearing in mind the applicants' assertion that the Mine failed to make the necessary capital and human resources investments to prevent and control lead pollution,[283] it is noteworthy that the Mine spent an additional one million pounds in 1962 (the equivalent of £18,307,995.02 pounds in 2021)[284] because of the "necessity to aim at a higher standard of waste gas cleaning for health reasons."[285] The applicants do not meaningfully challenge this.

325. The applicants have not shown how these evolving steps taken by the Mine over the relevant period were inadequate or unreasonable by the prevailing standards of that period. They cynically dismiss this evidence by stating that Anglo focuses

[279] AA para 138 p 001-2718.
[280] AA para 138 p 001-2718.
[281] RA para 527.11 p 001-7772.
[282] AA para 138.1 p 001-2718.
[283] FA para 211.2 p 001-103.
[284] AA para 138.2 p 001-2718.
[285] AA para 137.3 p 001-2718.

on “chronologising the technology”[286] and fails to address “the key components of its negligence”.[287]

326. But the applicants overlook that the evolution of the processes employed by the Mine shows that the Mine went from operating with absolutely no lead emission control systems to then-current emission control systems. And, on the uncontested evidence, these systems were modern and comparable to those associated with blast furnaces in the United States and Europe.

327. In the face of the applicants’ failure to define the prevailing standard of reasonableness, coupled with its inability to controvert the reasonableness of the processes employed by the Mine over the relevant period, the applicants cannot be said to present a triable issue on breach / negligence.

The five heads of negligence

328. The applicants advance Anglo’s negligent breaches of its duty under five heads. We address each one to show that the applicants have failed to establish a *prima facie* case on breach of a duty by Anglo.

<u>The alleged failure to prevent</u>

329. The applicants assert that:

329.1. The Mine, and by extension Anglo, failed to prevent lead pollution from escaping from the mining and blasting process alternatively Anglo should

[286] RA para 124 p 001-7632.

[287] RA para 119 p 001-7631.

have ceased the mining or blasting processes.[288]

329.2. The Mine, and by extension Anglo, failed to implement "measures to prevent lead pollution from escaping from the Mine's sinter, crushers, and smelters"[289] including installing taller chimney stacks to disperse smelter fumes more effectively and to avoid fumigating plumes.[290]

330. First, Anglo did not own or operate the Mine, so it is unclear how it should have "ceased the mining or blasting processes". However, had the applicants properly researched this issue, they would have known that open cast mining ceased in 1929. Any blasting thereafter, if it occurred, would have happened underground. Thus, any dust arising from above-ground mining would have occurred prior to 1929. There is no evidence on how lead pollution was caused by underground mining once aboveground blasting ceased in 1929.

331. In addition, it is common cause that coarse particles (like those generated by mechanical crushing and grinding) are typically deposited within minutes to hours after release and that they do not travel a long-distance.[291] This is confirmed by the applicants' expert, Prof Betterton.[292] Therefore, even if blasting occurred, the coarse particles generated by such processes would not travel the tens of kilometres required to contaminate the Kabwe District as alleged by the applicants. The applicants' assertion (contradicted by the common cause

[288] FA para 197.5 p 001-98.

[289] FA para 197.6 p 001-98.

[290] FA, para 1976(b) p 001-98.

[291] Sharma report section 3.4.1 p 001-3254.

[292] Betterton first report p 001-1633.

evidence) on this score is entirely ill-conceived.

332. Second, the applicants allege that the Mine failed to implement "measures to prevent lead pollution from escaping from the Mine's sinter, crushers and smelters."[293] Yet, it is clear from the evidence that each wave of upgrades brought significant additional measures (installed by the Mine) to prevent lead pollution from the sinter, crushers and smelters which included:

332.1. Bag filters and Doyle Impingers for the Newnam Hearths;[294]

332.2. Cyclone dust collectors and an electrostatic precipitator in respect of the Dwight-Lloyd sintering plant and the new blast furnaces;[295] and

332.3. Wet scrubbers, conditioning towers, dust cyclones, and an electrostatic precipitator (associated with the sinter plant) in the ISF.[296]

333. Moreover, Prof Betterton concedes in reply that the Mine did in fact fit hoods and dust control systems to the smelters and roasters when the Mine "added the Doyle Impingers to control emissions at the working face in and around 1955." This evidence from the mouth of the applicants' expert contradicts the assertion made by the applicants in their founding papers that effective hoods and dust control systems had not been installed in the smelters and roasters.[297]

334. The applicants further allege that the Mine had failed to implement measures to

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[293] FA para 197.6 p 001-98.

[294] Sharma report section 9.1 pp 001-3318 to 001-3319.

[295] Sharma report section 9.1 pp 001-3318 to 001-3319.

[296] Sharma report section 9.1 pp 001-3318 to 001-3319.

[297] FA para 197.6(a) p 001-98.

prevent lead pollution from escaping from the Mine's sinters and smelters, such as installing taller chimney stacks to disperse smelter fumes more effectively and to avoid fumigating plumes.[298]

335. However, had the applicants properly researched this issue, they would have known that the Mine increased the stack height from the Newnam Hearth system to the blast furnace and then the sinter plant stack on the ISF.

335.1. The stack height was increased to 120ft (36m) for the Newnam bag filter.[299]

335.2. The stack height was again increased in 1962 to 200ft (61m) for the ISF / sinter plant.[300]

335.3. The cupola stack referred to by the applicants' expert Prof Betterton was for the Doyle Impinger scrubber which did not treat the furnace off-gas, but rather ventilated the workplace near the "work plate" where the manual labourers managed the furnace charging.[301]

336. Prof Betterton conceded, in reply, that the stack heights were increased by the Mine. In fact, in reply, Prof Betterton suggested that the ISF sinter plant stack may have been up to 76.8 m tall.[302] The applicants' allegation of negligence premised on the failure by the Mine to have installed taller chimney stacks is,

[298] FA para 1976(b) p 001-98.

[299] George report para 4.5 p 001-3392.

[300] George report para 4.5 p 001-3392.

[301] George report para 32.5 p 001-3411.

[302] Harrison second report p 001-9520.

therefore, also entirely ill-conceived.

337. Instead, what the applicants have done is to cherry-pick a few monthly reports to suggest that the Mine had inadequate emissions control, whilst ignoring the annual and monthly reports attached to the answering affidavit showing the extensive measures taken by the Mine in respect of dust collection and the dust control system.

338. For instance, the applicants in their heads of argument state that "[t]here is evidence of annual atmospheric emissions of lead amounting to 407 long tons in 1952 and 252 long tons in 1954."[303] In fact there is no such evidence.

339. What the applicants omit to tell the Court is that the technology was designed to trap, capture and return to the smelter a significant proportion of this lead loss. This is conceded by the applicants expert Prof Harrison who observed that:

> "…the emissions reported by Barlin …of 407 tonnes of lead for the year 1952 for the Newnam Hearth plant, although it is unclear whether a proportion of this was trapped and returned to the smelter. There appears also to have been large potential losses from the sinter plant of the later ISF process… Barlin refers to monthly losses of 142 tonnes (55g/s) in 1969, although this may have been largely captured by the electrostatic precipitator. This is unclear from the flow diagram."[304] (Emphasis added.)

340. The applicants are speculating that the losses referred to in the monthly report imply that the lead may have been lost into the atmosphere. Without pointing the Court to the fact that these potential losses could largely have been captured (as

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[303] Applicants' HoA para 177.1 p 007-85.

[304] Harrison second report p 001-9538.

conceded by their expert Prof Harrison in respect of the ISF) and returned to the smelter, this submission is entirely misleading.

The alleged failure to cease and relocate

341. The applicants allege that the Mine and (consequently) Anglo were negligent by developing a township and mining houses near the Mine and the dumps.

342. First, there is no evidence that Anglo participated in the development and planning of a township and mining houses near the Mine and the dumps. This undermines the thesis advanced by the applicants, and disposes of the issue in its entirety. We reiterate that Anglo did not own or operate the Mine.

343. Second, when the Mine became aware of potential risks of lead smelting activities to the wider community during the early part of the 1970s, it took appropriate measures. As discussed above, by 1961 the Mine made substantial capital investments in the ISF with the intention to obtain a "higher standard of waste gas cleaning for health reasons."[305]

344. The Mine also adopted measures proposed by Prof Lane and Mr King from Manchester University which included 448 houses "in the bad area" being replaced and not being used again for housing.[306] The letter from the Mine Manager dated 7 September 1970 shows that a decision had been taken to "raze A, B, C section [houses in Kasanda] as soon as possible".[307]

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[305] AA para 137.3 p 001-2718.

[306] Anglo's FA in strike out application para 121.3.3 p 006-52.

[307] Annexure ZMX76 p 001-1197.

345. The “medium-density housing scheme” foreshadowed in Mr Lee-Jones’ letter eventually became Chowa township. Between January and June 1973, a rehousing scheme relocated 3 000 people from what the Mine at that stage identified to be the “bad area” of Kasanda, to Chowa.[308]

346. Thus, the applicants’ assertion made in their replying affidavit that Anglo found it too expensive to move the township is mischievous.

347. The applicants’ suggestion that the problem may have been wider than what the Mine at the time had identified as the “bad area”, i.e., the A, B, and C section houses in Kasanda, is not supported by any evidence. It is noteworthy that regarding the Kasanda residents that remained following the rehousing, Dr Clark[309] stated that:

> “three thousand persons have already been rehoused in good homes in CHOWA; to rehouse the remaining 8 000 Kasanda inhabitants should not be necessary provided adequate lead control measures continue to be enforced.”[310]

348. There is no evidence that the actions taken by the Mine at that time were insufficient or did not comply with prevailing standards or were unreasonable.

349. It is also evident from the Clark report that, while he had further suggestions that could be implemented by the Mine, he was also of the view that “much has

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[308] Anglo’s FA in strike-out application para 124 p 006-55.

[309] Clark’s own findings (Annexure ZMX3 p 001-482) noted that his investigations showed that:

> “of the four communities situated within a radius of approximately 3 000 metres of the Kabwe mine smelter, only two, namely Kasanda and Makululu were exposed to a high atmospheric lead environment.”

[310] Annexure ZMX3 p 001-478.

already been done to reduce lead in the effluent from the sinter and smelter furnaces" by the Mine.[311] (Emphasis added.)

350. The applicants have introduced the Clark report in these proceedings. They cannot ignore his findings when it does not suit them.

351. The applicants allege a duty to cease mining. They contend that, even if it could be argued that the Mine's interventions were the best that could be achieved at the time, there was still significant lead being lost to the atmosphere and there was a duty to cease mining.[312]

352. However, on the evidence before the Court, neither the Lane Report, Doctors Clark or Lawrence (all of which the applicants rely upon), nor anyone else, ever proposed that the Mine should cease operations as a measure to deal with the lead pollution problem. This alleged duty to cease is founded solely on a hindsight bias. It is not sourced in the record before this Court or in anything that was known at the time about the extent of the contamination and the measures that were required to be taken to deal with the problem.

353. Thus, the assertion that the Mine should have ceased to operate – even if the Mine's interventions were reasonable at the time – beggars belief. It suggests that the applicants are simply applying whatever standard they believe will advance their case.

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[311] Annexure ZMX3 p 001-478.

[312] Applicants' HoA para 367 p 007-170.

The alleged failure to remediate

354. The applicants allege that the Mine failed to take measures to protect the surrounding community, including tarring roads[313] implementing measures to prevent lead pollution from the Mine dumps or relocating residents from residential areas near the Mine. We address the latter concern above.

355. In respect of the remainder of the allegations, the uncontroverted evidence shows that, by the early 1970s, the Mine took multiple steps to control lead exposures in the surrounding community. This included:

355.1. Controlling fugitive dust from the tailings area; and the Mine's pumping system was modified to flood the tailings dumps in 1970.[314]

355.2. In relation to the mine dumps, the General Manager of the Mine explained that:

355.2.1. The objective of "provid[ing] water curtains to allay dust arisings" on the dumps could be achieved by "simply making better use of the existing tailings pumping system".

355.2.2. In this regard, the "work is now well underway" although it may be necessary to expend further sums "because there are small residual areas which have to be provided with perimeter sprays".

[313] FA para 197.8 p 001-98.

[314] AA para 1195.1 p 001-3105 and Annexure ZMX76 p 001-1196.

355.2.3. "[T]he partial blanketing of the dumps will be unnecessary if the areas can be kept sufficiently wet, and the cultivation of vegetation will be intensified on the outermost retaining walls."[315]

355.2.4. Roads that had not yet been tarred were watered to suppress dust on a daily basis.[316]

355.3. In relation to the tarring of roads:

355.3.1. Given that certain sections of the township would be replaced, the issue of tarring the gravel roads was limited to the remaining housing areas.[317]

355.3.2. Certain roads were already tarred and there was a "sequence of priority for completing the balance of the work."[318]

355.3.3. "It is estimated that 55,200 sq. metres [of road] are involved [in the tarring project] … It is the objective, as the contractor is on site and equipped for the work, to complete the majority of the work during 1970."[319]

355.4. Thus, the roads in the high-density townships were tarred from 1970 with

[315] AA para 1195.2 p 001-3015 and Annexure ZMX76 p 001-1195 to 001-1196.

[316] AA para 1195.2 p 001-3015 and Annexure ZMX76 p 001-1195 to 001-1196.

[317] Annexure ZMX76 p 001-1195 to 001-1196.

[318] Annexure ZMX76 p 001-1195 to 001-1196.

[319] Annexure ZMX76 p 001-1195 to 001-1196.

the goal of reducing dust over a planned total area of 55 200 m^2 of roads.[320]

356. The applicants' assertion on this head of negligence is, therefore, unfounded.

The failure to warn

357. The applicants allege that "Anglo and the Mine" failed to warn residents of the dangers of lead pollution. There is no evidence that Anglo was duty-bound to participate in engagements between the Mine and the community, as Anglo did not own or operate the Mine.

358. However, it is inconceivable that the Mine could have moved 3 000 residents of Kabwe and razed parts of the A, B and C sections of Kasanda, employed international experts and taken various remediation measures like the tarring of roads and watering of dumps while also, in turn, failing to warn or inform the residents of the reasons why it took such actions. The applicants themselves say that, in the Kabwe social context, information primarily travels by word of mouth.[321] This would eminently have been the case where such social upheaval occurred.

359. The applicants also plead that the "Mine and Anglo" failed to warn the Zambian government and subsequent owners of the Mine of the dangers of lead pollution. As we discuss in section four, after 1974 the Mine (which was ZCCM, an entity owned by the Zambian government) and the Zambian government were fully

[320] AA para 1195.3 p 001-3015 and Annexure ZMX76 p 001-1195 to 001-1196.

[321] Applicants' HoA para 758 p 007-333.

aware of the dangers of lead pollution. ZCCM took deliberate decisions in the 1970s and 1980s to skimp on maintenance and pollution control in favour of prolonging the economically viable life of the Mine.[322]

The failure to monitor and investigate

360. The Mine monitored and investigated the effects of lead based on what it knew and understood at the time concerning the extent of lead pollution. Acting on the advice of Dr van Blommenstein, amongst others, the Mine monitored the lead in-plant conditions for occupational health and safety reasons.

361. Once the Mine became aware of potential lead dangers to the community, the Mine acted promptly to investigate:

361.1. The Mine deputised Mr Barlin – the Assistant Mine Manager – to meet on 10 July 1970 in Lusaka with representatives of AACCA (not Anglo), which was based in Lusaka.[323]

361.2. In around 1970, Dr Ian Lawrence was employed as a medical doctor at the Kabwe Mine. He tested approximately 500 blood samples from children living in the vicinity of the Mine.[324] Within a month, his research led to the commissioning of a report by the Mine from Professor Lane and Mr King of Manchester University.[325] It also led to extensive investigations into children's blood lead levels being carried out by

[322] AA paras 202 to 230 p 001-2744 to p 001-2754.

[323] Anglo's FA in strike-out application para 120 pp 006-49 to 006-50.

[324] Supp FA paras 9.1 to 9.3 p 001-2544; AA paras 1343 to 1344 pp 001-3141 to 001-3142.

[325] Supp FA para 10.2 pp 001-2545 to 001-2546; AA para 1353 p 001-3143.

NCCM around 1972.[326]

361.3. The 1972 NCCM Annual Medical report notes that extensive investigations were being carried out by the Mine on workers, children's blood leads and also cord blood leads and mother's blood.[327]

361.4. The Mine assisted Dr Clark to conduct his research.[328]

362. Thereafter, detailed and appropriate steps were taken at great cost by the Mine, to address the problem. The measures that were taken by the Mine included the watering of the dumps, tarring of roads, relocating 3 000 residents in the *"*bad areas*"* of Kasanda, razing sections of the township on the western side of the Mine and building 800 houses in the eastern side of the Mine. The measures taken were reasonable and in line with what was known to be required at the time to address the lead pollution problem.

363. In summary, the applicants have failed to establish a *prima facie* case on breach of a duty by Anglo on any of the five heads of negligence they plead. Instead, they have resorted to selectively quoting from documents – thereby misrepresenting those documents' true tenor; and when faced with complete answers, sliding into an about-turn on crucial issues. The remaining two sub-

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326 Supp FA para 10.3 p 001-2546; Lawrence affidavit para 26 p 001-2553.

327 Supp FA p 001-2583. It states:

> "… However, a good deal of research work is being carried out at Broken Hill Division. On the industrial side, information and data are being collected on the lead in blood trends, hemoglobin's, etc., of employees working in the area where lead absorption is a hazard. Extensive investigations are also being carried out into children's cord blood leads and mothers' blood. It is expected that two or three papers in these fields will be submitted for publication in due course."

328 Annexure ZMX3 p 001-490.

sections address these tactics.

Misrepresenting material documents

364. The applicants misread certain documents, draw on select extracts and make conclusions that are not a fair reflection of the document relied upon. We illustrate this with reference to four essential documents:

364.1. The memorandum from Dr van Blommenstein.

364.2. The response from the Consulting Engineer dated 18 November 1949, a document that the applicants' legal representatives had in their possession but withheld from their founding affidavit.

364.3. The letter from the General Manager dated 19 January 1950 regarding the measures taken to prevent occupational exposure to lead.

364.4. And the so-called "Broken Hill attitude" internal memorandum.

Dr van Blommenstein's memorandum

365. The series of correspondence attached to the founding affidavit regarding the concerns expressed by Dr van Blommenstein, Anglo's Chief Medical Officer at the time, forms an important part of the applicants' case:

365.1. First, the applicants argue that this series of correspondence shows that ambient lead pollution should have been foreseen and in fact, also shows evidence that Anglo's chief medical officer was concerned about uncontrolled lead emissions into the atmosphere. This correspondence

is the centrepiece of the applicants' case concerning Anglo's alleged duty of care and the breach of its duty during the 1940s and 1950s.

365.2. Second, it is intended to serve as evidence to support the allegation that Anglo assumed specific responsibility for the control of lead pollution at the Mine and that it knew that the Mine was dependent on its direction and control.

365.3. Third, it is used as an anchor for the applicants' case that there was an alleged duty of care arising from the warnings raised by Dr van Blommenstein. We address this issue in section two above.

366. In their replying affidavit, the applicants re-iterate these contentions as follows:

> "The contemporaneous documents, including Dr van Blommenstein's warning from 1947, reflect that there were substantial, uncontrolled emissions of lead pollution during this period."[329] (Emphasis added.)
>
> "… [Anglo] knew or ought to have known of the scale of lead pollution within the Mine's premises that was identified by Dr van Blommenstein suggested that there was wider contamination in the surrounding community."[330] (Emphasis added.)
>
> "It bears repeating that as early as 1947, Anglo's own chief medical officer, Dr van Blommenstein, was appalled by the lead emissions in the smelter plant itself and, by extension, in the ambient Kabwe environment…" [331] (Emphasis added.)

[329] RA para 516.2 p 001-7768.

[330] RA para 690.2 p 001-7820.

[331] RA para 11.1.12 p 001-9616; Annexure ZMX 67 p 001-1164.

367. In their heads of argument, the applicants state that:

> "In 1947, Dr van Blommenstein, Anglo's Chief Medical Officer, unequivocally warned of the dangers of uncontrolled lead fumes and dust and the harmful effects this would have on workers. It was no stretch of the imagination to conclude that the prevailing winds were carrying this dust and smoke to the nearby communities, given the scale of production and the dry and dusty environment."[332]

368. However, a plain reading of the series of correspondence from Dr van Blommenstein shows that it only dealt with lead exposure to workers who were near the roasters and who inadvertently ingested lead because of poor dining room and change-house conditions.

369. As had been acknowledged by the applicants in their founding affidavit,[333] the measures that were proposed by Dr van Blommenstein included adequate ventilation in the smelter building, air analysis of the building, wetting of dusty areas and taking care during the removal of lead dross from furnaces. Dr van Blommenstein made extensive recommendations concerning the change-house conditions for the workers.[334]

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[332] Applicants' HoA para 335.3 p 007-151.

[333] FA para 165 p 001-84.

[334] For convenience, the letter in relevant part reads as follows:

> "in order to ensure that no lead is ingested by workmen, it is of the utmost importance that the Change-house conditions should be as adequate as possible. There should be every facility for workmen to bathe themselves and to change into clean, uncontaminated overalls at the commencement of work. Overalls should be supplied to all workmen and adequate facilities should be at hand for cleansing overalls daily. The present set-up in the washhouse is not adequate. A mechanical washing laundry apparatus has been ordered and this will, no doubt, relieve present conditions. Observations in this Change-house made it very clear that ingestion of dangerous Lead products is taking place amongst African employees. During the rood intervals, African workmen were seen drying their hands on their dusty overalls and then proceeding to the Dining Room for their meal. Towels should be supplied in the Change-house.

370. The concerns expressed had nothing to do with lead pollution to the surrounding community or the ambient Kabwe environment, nor does the letter imply any concerns about pollution beyond the Mine carried by prevailing winds.

371. At the outset of their founding affidavit, the applicants correctly conceded that "Dr van Blommenstein only expressed concern for employees of the Mine."[335] The applicants also acknowledged that while Dr van Blommenstein called for greater efforts to prevent lead fumes and measures to monitor lead emissions for workers, "this concern did not, however, extend to the general population of Kabwe."[336] (Emphasis added.)

372. This obviously makes sense, because Dr van Blommenstein by virtue of his office and by virtue of the prevailing knowledge at the time dealt with the occupational health and safety of the Mine's workers. Evidently, and on the applicants' own frank concessions, the concerns expressed by Dr van Blommenstein related only to in-plant hygiene conditions for workers and not to the environmental conditions to which the residents of Kabwe would be exposed.

373. However, and inexplicably, later in the same affidavit the applicants had clearly changed their minds about the import of this correspondence. They argue that

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> Furthermore, it was apparent there was not sufficient accommodation for all workmen in the Change house which led, not only to overcrowding but to the breaking down of the routine procedures which should be adopted in a Change-house specifically designed for persons employed in the Lead industry.
>
> The fact that there have already been cases of Lead Poisoning confirms the view that there should be stricter surveillance over the African employees in the change-house and further, methods should be introduced for the detection of atmospheric Lead and that the present system for the prevention of Lead fumes should be improved upon in the smelting Plant. If these methods are not adopted, it is my opinion that there will be a steady increase in the number or cases of Lead Poisoning in the future."

[335] FA para 164 p 001-84.

[336] FA para 192 p 001-96.

the alleged failure to "remedy lead pollution, and its consequent impact on the surrounding community, is further evident twenty years after Dr van Blommenstein first raised his concerns."[337] Of course, the applicants are now suggesting the concerns raised by Dr van Blommenstein related to the impact of lead pollution on the surrounding community.

374. This shift carried through to the replying affidavit, where the applicants contend that Dr van Blommenstein's concerns about in-plant hygiene lend support to their argument that there were "substantial, uncontrolled emissions of lead pollution during this period" or the repeated refrain by the applicants in reply that the concerns expressed by Dr van Blommenstein extended to the "ambient Kabwe environment". This is entirely misleading and unsupported by the very document on which the applicants rely.

375. To suggest, as the applicants do, that the one reference in Dr van Blommenstein's letter to lead fumes being evident from the roasting process inside and outside of the plant means that the risk to the wider community was foreseeable is misleading for three further reasons:

375.1. First, the nearest community at the time did not live on the doorstep of the Mine. The centre of the nearest community (Kasanda) was 2.2 km from the smelter furnace stack.[338] Around the 1970s, the gap between the edge of Kasanda and the Western boundary of the Mine was at least 1 km.[339] Simply pointing to the fact that there were fumes in the vicinity

[337] FA para 179 p 001-90.

[338] Annexure ZMX3 p 001-382.

[339] AA para 581.1 p 001-2879.

of the smelter works is not sufficient. The applicants have to show that it was foreseeable at the time – not with the benefit of hindsight or using current technologies – that those fumes were travelling distances and reaching Kasanda (and indeed, the entire Kabwe District). Moreover, it is accepted by the applicants that the dispersion of any fumes from the lead plant would be affected by distance from the plant, particle size and wind direction (among other factors). Importantly, heavy particles, like those generated by processes prior to smelting would settle first in the immediate vicinity of the plant.

375.2. Second, based on the applicants' case in reply, the impact of any fumes dispelled at a low height is that such fumes would only impact the nearby vicinity of the plant, settle quickly and would not be able to reach the residential community. The applicants make this argument in relation to fumes dispersed from the low stack heights at the Mine before 1946, which they argue resulted in particles being deposited before reaching the populated downwind areas.[340] The logical conclusion of this argument (developed in reply) is that the impact of any fumes surrounding the plant would similarly be deposited in the vicinity of the plant before reaching the populated areas.

375.3. Third, the applicants' theory of how Kabwe became contaminated is that emissions from the plant's smelter stacks were borne by the prevailing wind to areas in the district on which the "plume" was dispersed. To the

[340] RA para 185 p 001-7662.

extent that the lead pollution came about in that way, it has nothing to do with fumes in or outside the roasters in the nearby vicinity of the plant.

376. The applicants' attempt to distort the correspondence from Dr van Blommenstein by arguing its relevance to the "ambient Kabwe environment" and "lead pollution, and its consequent impact on the surrounding community" is, therefore, plainly inappropriate.[341]

The undisclosed response from the Consulting Engineer to Dr van Blommenstein's concerns

377. The applicants' representatives had in their possession (but did not disclose in the founding affidavit) a letter from the Consulting Engineer dated 18 November 1949 which responded to Dr van Blommenstein's concerns.[342] In the letter, it is stated that the board of RBHDC "fully endorsed Dr van Blommenstein's remarks regarding the necessity for improving conditions in the lead plant". The board further felt that "no time should be lost in taking any other measures which could be completed within a reasonably short period."[343]

378. The letter also said that the board instructed the assistant manager to proceed urgently with those recommendations that could be completed within six months.[344]

379. The applicants not only withheld this letter in their founding papers, but also

[341] FA para 179 p 001-90.

[342] AA para 124 p 001-2714.

[343] AA para 125 p 001-2713.

[344] AA para 125 p 001-2713.

advanced the misleading conclusion that "[e]vidently, the RBHDC and Anglo elected not to incur the costs of implementing significant preventative measures".[345]

380. In reply, the applicants attempt simply to downplay the significance of this letter by cynically speculating that it showed nothing more than the board paying lip service to Dr van Blommenstein's concerns.[346] This displays the hallmark of the applicants' use of historical documents: They distort their meaning attempting to show neglect on the part of Anglo and, when the distortion is revealed, they say that the real but innocuous meaning of the document is an attempt to cover up some underlying underhandedness not supported by the document.

The General Manager's letter dated 19 January 1950

381. In further advancing their erroneous argument that the Mine "elected not to incur the costs of implementing significant preventative measures" following Dr van Blommenstein's concerns, the applicants seek to rely upon the letter dated 19 January 1950 from the General Manager of the Mine which states that the Mine "did not consider it advisable to make more than one change at once. Alterations have been made one at a time and the effects observed."[347]

382. Flowing from this statement, the applicants leap to the conclusion that the Mine did not want to implement significant preventative measures and "that the only alteration that was contemplated was the installation of hoods and a fan from the

[345] FA para 170 p 001-87.

[346] RA para 55 p 001-7611.

[347] FA para 171 p 001-87.

blast furnace, at a cost of 400 pounds."[348]

383. However, a complete reading of the letter of 19 January 1950 shows that many alterations were in fact made (just one at a time) and that the General Manager was genuinely concerned with preventing dust exposure to workers and to ensure better in-plant hygiene. The General Manager identified the main points of dusting and measures taken to address them, such as:

383.1. Dust coming from tipping concentrates into the hearth storage bins was to be reduced by keeping the materials damp.

383.2. Keeping the material wet would also prevent dust when it is shovelled from the bins onto the furnace.

383.3. Dust resulting from blow-back from the hearths was greatly improved by lowering the "skirts" of the hearth hoods.

383.4. Dust which escaped the ventilation system was suppressed by wetting the floor and sweeping it up while still wet.[349]

384. The letter also identified proposed alterations to increase the speed of the main bag house fans, connecting the forehearth fan to the motor and installation of the hoods and fans. It noted that the work would take a couple of months to complete, however, the numerous alterations were effected one at a time, so that the effects could be observed.

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[348] FA para 171 p 001-87.

[349] Annexure ZMX70 pp 001-1169 to 001-1170.

385. The suggestion in the founding affidavit that "the only alterations that were contemplated were the installation of hoods and a fan for the blast furnace" appears to be made with the intention of creating the impression that the Mine made only the most minimal effort and minimal investments to deal with the occupational exposure to lead pollution. The attempt is mischievous and the impression sought to be conveyed, incorrect – as borne out by a reading of the letter.

The so-called "Broken Hill attitude" internal memorandum

386. Finally, in seeking to controvert the evidence regarding the evolution of the lead recovery processes at the Mine, the applicants unashamedly clutch at straws.[350]

387. The applicants found in a tranche of documents provided to them by Anglo, the so-called "Broken Hill attitude" internal memorandum.[351] The applicants assert that this document shows:

387.1. "[T]he Mine remained a dirty, dysfunctional operation [as a result of] the 'Broken Hill attitude' of long-standing disregard and neglect."[352]

387.2. There was a "pattern of negligence" at the Mine.[353]

[350] RA section V(A)(3) para 120 p 001-7630.

[351] Annexure ZMX89 p 001-7861.

[352] Applicants' HoA para 148 p 007-72.

[353] RA para 25.3 001-7600.

387.3. “Anglo failed and refused to implement” the common-sense measures to “address the problem of lead pollution, including the replacement of soil and the capping of mine dumps”.[354]

387.4. “Serious failures” in regard to “technology during the period that Anglo was operating the Mine” and “the extent to which they had become part of the culture of the mine under Anglo's control”.[355]

387.5. “[I]t was the Broken Hill attitude that resulted in so much environmental pollution for so long while Anglo operated the mine and smelting operations. Poor housekeeping as described in the internal memo (for example: the indiscriminate sitting of material dumps; the overloading of vehicles which caused material to be deposited all over the road; the lack of control of airborne effluents) led to excessive airborne dust which would have [been] deposited in Kabwe just a few kilometres downwind, for example. Roads that were left unpaved also contributed to excessive airborne dust”.[356]

387.6. “[T]hat Anglo did not operate or maintain the Mine’s equipment properly during the relevant period”.[357]

388. On its plain reading, the “Broken Hill attitude” internal memorandum is nothing more than a mundane document about in-plant operational housekeeping

[354] RA para 25.3 001-7600.

[355] RA paras 120 to 121 pp 001-7630 to 001-7631.

[356] RA para 123 p 001-7632.

[357] RA para 15 p 001-7645.

issues.[358] This is made clear by the concluding recommendation in the document, which dealt with the "responsibility to keep the plants clean". The report is overwhelmingly concerned with the appearance of the Mine and its environs; e.g. altered positions of "all material dumps … so as to improve their appearance"; construction of brick walls around "some areas of the Mine which … are practically impossible to maintain in a condition of pleasing appearance"; and a "comprehensive … sheeting and painting programme" (emphasis added). The "Broken Hill attitude" memorandum has nothing to do with lead emissions or even pollution more generally – and the applicants' continued reliance thereon after this was pointed out in the strike-out application is mischievous.[359]

389. Lead is only mentioned once in the document, in the context of repair to the main security fence in the vicinity of the Lead Refinery.[360] The document refers to "material dumps" which the applicants incorrectly equate to mine dumps.[361] Significantly, there is no mention in the report at all of breakdowns in the technology necessary for lead emissions control.

390. The document is concerned, in its own words, with bringing the plant up to "the required standard of cleanliness and tidiness".[362] The document dealt with matters of general housekeeping in and around the plant itself. Even the reference to water and airborne effluents is related to general housekeeping in and around the plant.

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[358] Anglo's FA in strike-out application para 24 p 006-17.

[359] Anglo's FA in strike-out application para 22 p 006-17; see paras 16-30 pp 006-13 to 006-19 generally.

[360] Anglo's FA in strike-out application para 24 p 006-17.

[361] Anglo's FA in strike-out application para 24 p 006-17.

[362] Anglo's FA in strike-out application para 25 p 006 – 17.

391. Rather than evidencing a vice, the “Broken Hill attitude” internal memorandum shows a Mine that placed pedantic emphasis on safety and cleanliness. On its terms, it clearly has nothing to do with lead pollution or its dispersal in the Kabwe district. The applicants’ spin in respect of this document is entirely misleading.

The irreconcilable about-turn

392. The applicants' case regarding the causal mechanism for lead contamination in Kabwe – a fundamental thesis for purposes of disclosing a cause of action – suffers an internal contradiction.

393. The applicants’ initial theory of contamination appears in the founding papers under the heading “the mechanism of contamination in Kabwe”[363] and may be summarised as follows:

393.1. First, throughout the Mine’s operations, the prevailing wind carried lead fumes and dust from smelting operations directly over Kasanda and Makululu and, in the summer, over nearby Chowa.[364]

393.2. Second, a fumigating and looping plume from the smelter delivered pollutants to the ground where they loop downwards and envelop nearby residences. The low height of the Kabwe smelter stacks would have been an essential element in this process.[365]

[363] FA paras 76 to 78 p 001-46 to 001-47.

[364] FA para 76 p 001-46. The applicants’ specific reference to the KMC townships in their founding papers shows why their class definition embracing over the whole of the Kabwe District is inappropriate.

[365] FA para 77 p 001-47.

393.3. Third, the dispersion of lead from the smelter stacks and mine dumps is reflected in the "heat map" of lead contamination in the soil surrounding the Mine. The darker areas reflect the highest level of contamination in the KMC townships.[366]

394. Thus, a key component of the applicants' explanation for how Kabwe became contaminated is that there were airborne emissions from the smelter stack that created a fumigating and looping plume and "the low height of the Kabwe smelter stacks would have been an essential element in this process"[367] (emphasis added). The shorter stacks were identified by the applicants as the causal nexus between the historical operation of the plant and the current lead contamination in Kabwe.

395. The founding papers doubled down on this theory by stating that one of the key areas of the Mine's negligence was that it failed to implement measures to prevent lead pollution from escaping the Mine's sinters, crushers and smelters including "installing taller chimney stacks to disperse smelter fumes more effectively."[368] In addition, echoing the opinion of their expert Prof Betterton, the applicants alleged that "the smelter stack was built too low to function adequately under the prevailing weather conditions, resulting in the fumigation of local township areas."[369]

396. Prof Betterton, in turn, commented on a photograph of the Mine's operations

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[366] FA para 78 p 001-47.

[367] FA para 78 p 001-47.

[368] FA para 197.6 p 001-98.

[369] FA para 224.3 p 001-107.

between 1916 and 1926 as follows:

> "I estimate the top of each smelter stack to be about 12-meters above ground level. This is extremely short (essentially roof-level) and allowed fumigating and looping plumes amongst other shapes, to pollute the mining operations and Kasanda."[370]

397. Prof Betterton further theorised that, to avoid a fumigating plume, the smokestack had to be "no less than 2.5 times the height of the blast furnaces".[371] Following this rule of thumb, the stacks on the early blast furnaces should have been about 30 m instead of 12 m above the ground.[372]

398. In respect of the Newnam Hearths, Prof Betterton – relying on "descriptions in Britannica" – took the view that the furnaces used "cupola furnace stacks" which "rose to only 6 – 11 m high above the ground."[373] (Emphasis added)

399. The applicants were wrong concerning "the low height of the Kabwe smelter stacks" as discussed above. In 1946, the stack height was increased to 120 ft (36 m)[374] for the Newnam bag filter, and again increased in 1 962 to 200 ft (61 m) for the ISF/ sinter plant.[375] The applicants have, in reply, not disputed this.

400. This means that what the applicants alleged was one of the key mechanisms for how Kabwe became contaminated during the relevant period, critical to their case on breach of duty was, in fact, based on a flawed and incorrect

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[370] Betterton first report p 001-1626.

[371] Betterton first report p 001-1632.

[372] Betterton first report p 001-1632.

[373] Betterton first report p 001-1625.

[374] AA para 1190.2 p 001-3102.

[375] AA para 1190.3 p 001-3102.

understanding of the Mine's plant and operations.

401. Then, in what can only be described as an extraordinary about-turn concerning an issue on which the applicants initially placed significant reliance, the applicants resorted to a contention (in their replying affidavit) that:

401.1. Short smelter stacks – less than 20 m – did not result in widespread contamination in Kabwe. Instead, short smelter stacks would only have an impact in the immediate vicinity of the Mine "too close to impact heavily upon closest residential areas".[376]

401.2. And the about turn in reply: Tall smelter stacks were the cause for contamination in Kabwe, not short ones.

402. Leveraging the opinion of their expert Prof Harrison, the applicants argue in reply that the maximum distance at which lead could be deposited from a short smelter stack (less than 20 m) is 425 m. The applicants state that:

> "Using a stack height of 20 metres (and allowing some rise of the buoyant plume), Prof Harrison predicts that the maximum distance at which the lead would deposit is at 425 metres downwind from the Mine during neutral meteorological conditions. As per Figure 5.1 in the ZCCM Rehabilitation and Decommissioning Report, the downwind distance to Kasanda is 1 600 to 2 600 metres. Therefore, Prof Harrison concludes that lead from the pre-1925 stacks would have fallen well short of populated areas. Moreover, Prof Harrison points out that this estimation ignores the fall-out of heavy particles, which would reduce this distance even further.

[376] FA para 190.2 p 001-7664.

> In comparison, according to AA54, the stack height at the ISF smelter for the period between 1962-1993 was 30.5 metres. On this basis, Prof Harrison predicts a distance of 921 metres which 'implies that emissions from the later plant installed from 1946 onwards would be largely responsible for pollution in the areas of habitation'."[377]

403. Inexplicably, therefore, it is no longer the "extremely short" stacks of about 12 m above ground level that allowed for the fumigating plume over Kasanda and caused lead contamination. Now the new argument is that these short stacks meant that the fumes would never even reach Kasanda. In fact – the applicants now contend – it was the increased stack heights of 30 m and above that were the cause of contamination. These increased stacks, on the applicants' new argument, conveniently coincide with Anglo's period of involvement with the Mine – another illustration of the applicants' hallmark treatment of the evidence.

404. The applicants' *volte face* is telling. The applicants had pegged their theory of contamination on the "low height of the Kabwe smelter stacks"[378] which they argued was "an essential element" of the mechanism of contamination in Kabwe and a key aspect of Anglo's negligence. After the applicants' poor understanding of the operations of the Mine had been exposed, they pivoted to a new and contradictory argument. Was the Mine negligent because of short stacks or tall stacks? The applicants cannot even answer this question.

405. There seems to be two main reasons why the applicants have pivoted to this new argument in reply.

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[377] RA paras 187 to 188 p 001-7663.

[378] FA para 77 p 001-47.

406. The first reason is that in the founding affidavit, the applicant failed to take into consideration two key sources of emissions that would account for the current contamination – namely pre-1925 emissions and the high emissions that occurred when the pollution controls of the ISF/sinter plant collapsed in 1985 after years of running it down.

407. Regarding the pre-1925 emissions,[379] it is common cause that this was a period of "relatively high emissions of lead"[380] when there was uncontrolled released of lead into the atmosphere because there were no air emissions controls.[381] The Mine used a short stack estimated to be less than 20 m during this period.

408. By developing the argument in reply that short stacks were now harmless to populated areas the applicants attempted conveniently to eliminate pre-1925 emissions for which they have not accounted.[382]

409. The second key source of emissions that the applicants failed to consider is that which occurred after the Mine was nationalised, when ZCCM decided to operate the ISF/sinter plant without any emissions control, leading to the collapse of the base of the electrostatic precipitator. According to the applicants' expert, Prof Betterton, these events would have caused higher emissions via the stack

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[379] RA para 190.1 p 001-7664. The applicants' expert states that during this period the furnaces "must have emitted prodigious amounts of lead fumes and dust into the environment" (Betterton report p 001-1624 to 001-1625.

[380] RA para 190.1 p 001-7664.

[381] There were absolutely no emissions controls employed by the Mine during this period. The fumes released were entirely uncontrolled. Betterton report p 001-1624 to 001-1625.

[382] RA para 185 p 001-7662. The applicants argue that:

> "due to the very small stack heights at the Mine during this period [pre-1925], much of the emitted lead deposited before reaching the populated downwind areas. In comparison, emissions from the later plant installed from 1946 onwards are largely responsible for pollution in the areas of habitation."

from about 1985.[383]

410. Again, unable to deny the fact there were higher emissions via the stack due to ZCCM's decision to operate the sinter plant without air emissions controls, the applicants build on the theory that emissions released at low heights were restricted to the immediate vicinity of the Mine and therefore did not reach the populated areas. Thus, they again conveniently (but unsuccessfully) disregarded a key source of emissions for which they had not accounted in the founding affidavit.

411. The second reason for the applicants' U-turn on what they contend was the cause for contamination (low stack heights) was to support the AERMOD model which they advance for the first time in reply. The apparent purpose of the AERMOD model was to illustrate that windborne emissions from the Mine could reach the entire Kabwe District.[384] The upshot of the AERMOD model was that it provided a basis for the applicants to argue that "wind-borne emissions from the Kabwe mine [and taller stacks] could potentially reach the entire Kabwe District depending on wind direction and speed."[385] The problem for the applicants is that Prof Betterton squarely concedes that the model uses "fictitious"[386] concentrations and it cannot, on its own, be relied upon to come to

[383] Betterton second report para 11.2.15 p 001-9623.

[384] RA para 216 p 001-7674. To do this modelling, Prof Betterton chose two stack heights (30 m and 76 m respectively (corresponding with the stack from 1962)) and one 10 m high tailings dump. RA para 144 p 001-7640.

[385] RA 147.6 p 001-7644. Emphasis added.

[386] Betterton's second report para 9.1.5 p 001-9606.

a firm conclusion about the role of the smelter stack.[387]

412. Thus, even though the taller stack theory was useful in developing the AERMOD model based on fictitious inputs, it ultimately does not advance the applicants' case.

Conclusion

413. The applicants' case on breach of duty is stillborn as it suffers from several fundamental flaws to establish, even on a *prima facie* basis, that the Mine (and much less so Anglo) acted negligently over the relevant period.

413.1. The first fundamental flaw is that the applicants conflate concerns expressed about in-plant hygiene for workers with external environmental lead pollution.[388]

413.2. The second flaw is that the applicants misread various documents and selectively extract quotes from these documents to advance their preferred narrative.

413.3. The third flaw is that while they assert that Anglo acted negligently, they have failed to articulate the prevailing standard that Anglo allegedly breached. In the absence of articulating and establishing what the prevailing standards were during the relevant period, the applicants

387 Prof Betterton states that the AERMOD modelling was intended to be "used alongside other expert evidence and determination before firm conclusions could be drawn as to the role of the smelters and the tailings dump as the source of lead pollution in the outer reaches of the Kabwe district." Betterton's third report para 7.4 p 006-517.

388 AA para 1132 p 001-3084.

invite this Court to embark upon an impossible enquiry into whether Anglo has breached such an unknown standard.[389] For this reason alone, the applicants' case is fatally deficient and, therefore, does not raise a triable case.

414. Moreover, Anglo has demonstrated that the way the technology employed by the Mine evolved over the relevant period, was consistent with prevailing standards and practices. This is to be contrasted with the lack of any emissions control employed by the Mine prior to the relevant period. The applicants were unable to meaningfully controvert these statements.

415. These fundamental shortcomings are exacerbated by the about turn done by the applicants regarding their theory of contamination. They have introduced a fatal contradiction into their case, albeit to paper over significant other shortcomings.

416. We consequently submit that the applicants have not demonstrated a triable issue on breach of duty.

[389] AA para 161.1.2 para p 001-2725.

SECTION 4: ANGLO DID NOT CAUSE THE CLASS MEMBERS' LOSS

Introduction

417. Why is the community around the Mine today exposed to extraordinarily high levels of lead in their soil?

    417.1. Is it, as the applicants say, because Anglo purchased shares in the Mine in 1925, when open blast furnaces had already spewed lead pollution onto that soil, and arranged capital so that the Mine could, over the years, upgrade to "state of the art" production facilities with effective emissions controls?

    417.2. Or is it because ZCCM, after 1974 and by its own admission, ran the smelter and sinter plant into the ground without adequate (and for a time with no) emissions controls, permitting lead exposure to shoot through the roof, then failing to remediate upon closure, and thereafter selling its contaminated housing stock to unsuspecting members of the public (among many other aggravating actions)?

418. The answer is self-evident.

419. The applicants attempt to build an unfounded case of neglect against Anglo based upon isolated examples of normal housekeeping issues at the Mine in historical documents, as encapsulated in their distorted reading of the Mine's "Broken Hill attitude" internal memorandum. As against the applicants' historical conjecture, they have no answer to the uncontroverted examples of ZCCM's reckless neglect of the Mine and the plant during and after ZCCM's disastrous

stewardship. They attempt to explain away ZCCM's callous neglect as a seamless continuation of the Mine's conduct throughout the relevant period – an attempt that fails dismally when the diametrically opposite responses to evidence of community lead exposure of the Mine (as at the end of the relevant period, from 1970 to 1974) and ZCCM (from 1994 onwards) are contrasted.

420. They also say that, at any (unspecified) sign of lead pollution, Anglo should have "advise[d] and instruct[ed] the Mine to cease smelting and dumping at the premises, and to relocate those operations if necessary".[390] Leaving alone whether Anglo was in any position so to "advise and instruct", and the patent impracticality and lack of realism of the proposal: It is common cause that in other smelter communities around the world, BLLs rapidly decreased upon decommissioning of the smelter and remediation of the surrounding environment.

421. This reduction was the natural and expected course of events at Kabwe too. The only reason this did not come to pass is ZCCM's reckless decisions not to implement its comprehensive, externally-funded plans and to commit adequate resources to remediation, but to rather to monetise the Mine, the plant and the tailings dumps by selling them to private investors in an un-remediated state; and to do the same with its housing stock.

422. ZCCM's actions not only allowed, but indeed magnified, the festering of environmental contamination that could have been contained and resolved with relative ease, given the common-sense plans and extensive developmental aid

[390] Applicants' HoA para 39.5 p 007-23.

at its disposal.

423. But for ZCCM's reckless neglect, which continues to this day, members of the proposed classes would not have suffered any effects of lead pollution. ZCCM's actions and omissions are proximate in time to their injuries and took place against a crystal-clear backdrop of knowledge of the harmful effects of its decisions. By contrast, Anglo's alleged and speculative omissions occurred in a different era, between a century and 48 years ago, when knowledge of the harmful effects of lead pollution on smelter communities were only starting to emerge in international publications; and it would be another twenty years before the use of lead in petrol (for example) was considered harmful enough to start phasing out.[391]

424. Against this backdrop, the applicants' case that Anglo (as opposed to ZCCM) caused the present injuries of class members is, at best, untenable. But even if a causal link between any conduct of Anglo during the relevant period and any injuries currently suffered could be shown (which it cannot), then Anglo would only be held responsible for such contribution if it could be shown (which it cannot) that the contribution was made in a negligent way – i.e. that Anglo's "guilty lead" emitted between 50 and 100 years ago contributes to current injury and such contribution was more than *de minimis*. In such case Anglo could only be held liable to the extent of the guilty contribution and no more. Even then, the causal link was broken by the subsequent reckless conduct of ZCCM.

[391] AA para 653.2 p 001-2906; Annexure AA8 para 6.6 p 001-3398.

Factual causation

425. The applicants accept that they need to show not only that Anglo factually caused the class members' injuries, but also that it was the cause in law – given the obvious remoteness of the harm. We deal first with factual causation.

"But for" causation

426. Generally English law – which we will assume for purposes of this argument only, applies to the causation inquiry – requires a plaintiff to prove that their injuries were caused by a defendant's negligence. This is a test often described as the "but for" test, i.e. "but for" the defendants' negligence the injuries would not have arisen.[392]

427. To prove "but for" causation, the applicants need to show that if Anglo had acted reasonably during the relevant period, the pleaded injuries would not have arisen. There are many difficulties with this proposition, and it is only faintly advanced in the applicants' heads of argument.[393] The applicants have chosen to concentrate their energies on the proposition that Anglo made a "material contribution" to the class members' injuries. This proposition is advanced on the strength of English case law recognising an exception to the "but for" doctrine where cumulative contributions to divisible injuries are concerned.

428. The case for "but for" factual causation advanced in the applicants' heads of

[392] Hermer first affidavit para 28 p 001-2295.

[393] In three paragraphs spanning less than two pages: Applicants' HoA paras 430 to 433 pp 007-194 to 007-105.

argument is as follows:

428.1. First, they say that, if "Anglo" had ensured that safe systems and working practices had been employed at the Mine prior to 1974, those safe practices would have continued even after 1974.[394] The necessary (but unstated) logical corollary of this theory is that no injuries would then have resulted if the safe practices endured after 1974 – which, in turn, implies an admission that ZCCM indeed employed unsafe practices, and that those unsafe practices are the cause of the injuries. It bears repetition that all potential class members with claims not barred by the statute of limitations were born long after the relevant period. (For the sake of convenience, we deal with the issues raised by ZCCM's reckless neglect under the rubric of legal causation below, although they are also relevant to factual causation.)

428.2. Second, they say that "Anglo" had a duty to cease or relocate mining operations, as emissions could not be safely controlled.

429. The first difficulty with this theory of "but for" causation is that the applicants have not illustrated (as opposed to alleged) that Anglo acted unreasonably in the first place – a matter that forms the subject of section three. We show that the allegations that the Mine employed unreasonable and unsafe working practices during the relevant period are vacuous and unfounded; and there is in any event no link between the alleged practices and Anglo.

[394] Applicants' HoA para 431 p 007-194.

430. To give one example, recurring throughout the applicants' heads: their allegation of a "Broken Hill attitude" allegedly showing a pattern of negligence is based on a single internal memorandum from 1970 that reports on certain housekeeping blemishes on the plant site. The document deals with minor and mundane housekeeping issues as we have fully demonstrated in section three above.

431. In contrast to the so-called "Broken Hill attitude", Dr Lawrence – a critical first-hand observer procured by the applicants – opined that "the Mine was run very efficiently" in 1969 and the early 1970s.[395]

432. The second difficulty is that it is impossible to show that but for Anglo's allegedly unreasonable actions or omissions during the relevant period, the applicants would not have sustained injuries. This impossibility arises from at least[396] four factors:

    432.1. First, it is common cause that lead naturally occurs extensively across the Kabwe district and that current reprocessing of tailings contribute to high levels of lead in the soil. Thus, the applicants concede that Kabwe "residents may still be affected by high lead levels in the soil, both from naturally occurring mineralization and the impact of the smelting and reprocessing of tailings" (emphasis added).[397] Anglo has shown that there are multiple sources of lead pollution in Kabwe, including naturally-

[395] Lawrence affidavit para 9 p 001-2551.

[396] There are other factors too, which are more suitable for adjudication at trial, such as yet further sources of lead in the Kabwe environment, including residue from leaded petrol and paint, traditional or herbal remedies and current smelting activities.

[397] FA para 80.6 p 001-49.

occurring lead.[398] Even the "plume-like shape" of the alleged fall-out from the smelter is a naturally occurring trend in that area.[399]

432.2. Second, it is common cause that the open blast furnaces emitted uncontrolled lead pollution in the period up to 1925, when a decade of high production concluded.[400] This pollution would have remained in the soil surrounding the Mine, on the applicants' own version. We deal with this issue in section three above.

432.3. Third, the applicants fail to show that work practices and safety measures reasonable for their time did not prevail during the relevant period or, if employed, would have prevented lead pollution that remain in the soil surrounding the Mine. We deal with this issue in section three above.

432.4. Fourth, the common cause fact that ZCCM ran the ISF smelter and sinter plant in a reckless fashion between 1974 to 1994 and in this manner caused unprotected, or minimally protected, lead emissions for at least periods during that time. We deal with that issue (and its lack of foreseeability) in the section dealing with legal causation below.

433. Thus, on any version, at least a major portion of the lead allegedly causing the class members' injuries would have been in the soil, whether Anglo had acted in an unreasonable fashion during the relevant period or not. The applicants cannot

[398] AA paras 985 to 987 p 001-3054.

[399] AA para 1061 p 001-3067.

[400] AA para 98 p 001-2706.

show “but for” factual causation.

434. Appreciating this, the applicants’ case on factual causation centres on the doctrine of material contribution.[401]

Material contribution

435. English law has developed a potential exception for the need to show “but for” factual causation in cases where exposure to a harmful substance could have multiple sources.[402] In such scenarios, the test for causation of a personal injury depends on whether there is a single cause for an injury or multiple causes; and whether the injury is divisible or indivisible.

436. Where there are cumulative causes of a divisible injury, it will not be necessary for the plaintiff to prove the defendant’s breach of duty was the sole, or even main, cause of the damage, provided s/he can demonstrate that the breach made a material contribution to the damage. This follows from the decision of the House of Lords in *Bonnington*.[403]

437. In *Bonnington*, the plaintiff contracted pneumoconiosis from inhaling air which contained silica dust at his workplace. The main source of the dust was from pneumatic hammers for which the employers were not in breach of duty (the “innocent dust”). Some of the dust (the “guilty dust”) came from swing grinders for which they were liable by failing to maintain the dust-extraction equipment.

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[401] Applicants’ HoA paras 434 to 466 pp 007-195 to 007-208.

[402] Hermer first affidavit para 29 p 001-2296.

[403] *Bonnington Castings Ltd v Wardlaw* [1956] AC 613.

438. There was no evidence as to the proportions of innocent dust and guilty dust inhaled by the plaintiff and, as such, the plaintiff could not prove *"but for*" causation. Nonetheless, the House of Lords drew an inference of fact that the guilty dust was a material contributory cause, holding the employers liable for the loss. Later English law cases held that the defendant would only be held liable for the loss proportionate with its contribution to the harm.

439. Thus, in *Bonnington*, the plaintiff did not have to prove that the guilty dust was the sole or even the most substantial cause if he could show, on a balance of probabilities, that the guilty dust had materially contributed to the disease. Anything which did not fall within the principle *de minimis non curat lex* would constitute a material contribution.[404]

440. The upshot of the *Bonnington* doctrine is that, if the injury is divisible and it is caused by exposure to lead, then a material contribution by the defendant will suffice, although the defendant will only be liable to the extent of its contribution to the injury.[405]

441. If, however, there are multiple causes of an injury that operate distinctly, such that exposure to lead adds a new, discrete risk factor to other existing risk factors, then there is no room for the material contribution test. The plaintiff must then prove that lead exposure was the "but for" cause of their injury, on the balance of probabilities.[406]

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[404] Gibson affidavit paras 42-44 pp 001-3951 to 001-3952.

[405] As the applicants recognise: Applicants' HoA para 441 p 007-198.

[406] *Wilsher v Essex Area Health Authority* [1988] AC 1074; *Williams v Bermuda Hospitals Board* [2016] AC 888.

442. If causation is proved by applying the material contribution test, then the defendant will be liable: (i) to the extent of its contribution, if the injury is divisible; or (ii) for whole of the injury, if it is indivisible.[407] (It is common cause that injuries caused by lead exposure are divisible.[408])

443. In *Bonnington*, proving that the injury was caused by silica dust was straightforward, given that silicosis is only caused by silica dust. However, lead exposure does not cause a "signature injury" and many of the class members' alleged sequalae injuries may (also or exclusively) be caused by other factors, such as genetic predisposition, nutrition etc.

444. Thus, there are two important and interconnected questions that are likely to inform an English Court's approach on the issue of causation and, relatedly, the extent of potential liability, namely:

    444.1. If there are multiple potential causes of a particular injury: are those causes cumulative or discrete?

    444.2. Is the injury a "divisible" or "indivisible" injury?[409]

445. In this matter, the parties are *ad idem* that exposure to lead which causes injury is a dose-related divisible injury.[410] Thus, the way in which the doctrine of material contribution operates in the current matter may be explained as follows:

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[407] Gibson affidavit para 137.4 p 001-3984.

[408] Applicants' HoA para 425 p 007-191.

[409] Gibson affidavit para 41 p 001-3951.

[410] Hermer first affidavit para 30 p 001-2296; AA para 43 p 001-2685.

445.1. If the injury is found to be an elevated BLL, then at English law having made a material and guilty contribution to the lead in soil may be sufficient to find liability (limited to the proportional contribution to the lead pollution). This is the primary case that the applicants advance in the section of their heads dealing with factual causation.

445.2. However, if the injury is found to be a so-called sequalae injury of lead-exposure, in relation to which the lead exposure only adds a new, discrete risk factor to other existing risk factors (such as, for instance, ADHD), then the applicants would have to show that lead exposure was the "but for" cause of their injury. If causation is proved in that way, then Anglo would only be liable to the extent of its guilty contribution to the lead in the soil.[411]

446. The applicants' primary case on factual causation, i.e. that Anglo should be held liable for a "material contribution" made by the Mine to lead in soil during the relevant period, is based upon two simple propositions:

446.1. The first is that lead, once deposited in surface soil, persists for a very long time and may therefore continue to pose a danger to communities for decades or even centuries after emissions ceased, if the soil remains un-remediated.

446.2. The second is that, during the relevant period, the Mine produced 66% of the lead produced in its lifetime and the guilty contribution to lead

[411] Gibson report para 137.4 p 001-3984.

pollution is therefore "broadly commensurate" with the production.[412].

447. In the lifespan of the Mine, there are three critical times:

447.1. The first is the pre-1925 period. This period prior to Anglo's links with the time when the Mine was (it is common cause) characterised by "relatively high emissions of lead."[413]

447.2. The second is the "relevant period", i.e. 1925 to 1974. It is common cause that this period accounts for approximately 66% of the lead produced by the Mine and that the Mine from time to time upgraded its air emissions control equipment, which was capable of being as high as 99% efficient.[414]

447.3. The third period is 1974 to the present. As we show below, the glaring omission in the applicants' case is any consideration of ZCCM's conduct in the 20 years that it operated the Mine and for the almost thirty years after the Mine's closure. That conduct, without a doubt, caused the current lead exposure experienced by the applicants.

448. The applicants' primary case on factual causation assumes that the 66% lead production during the relevant period shows that Anglo was "largely responsible for the current contamination of the environment."[415] They assume a linear

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[412] Applicants' HoA para 46.4.2 p 007-30. The applicants' careless slip in this paragraph from "lead production" to "lead pollution" is telling.

[413] RA para 190.1 p 001-7664.

[414] Betterton report p 001-1625; AA paras 131.3 to 132 p 001-2716.

[415] FA para 223.3 p 001-106.

relationship between lead production and lead pollution for one simple reason: they have no aerosol data – as none is available;[416] moreover, none will be available at trial.[417]

449. This artificial and baseless approach requires this Court to:

449.1. Ignore that in the period up to 1925 there were high emissions that were completely uncontrolled.

449.2. Ignore that the Mine's smelting and operational processes changed over the lifespan of the Mine (1915-1994) and processes had improved.

449.3. Ignore the impact of ZCCM's conduct between the period 1974 and 1994 which – based on ZCCM's own records – caused extraordinary pollution to the environment in Kabwe.

449.4. Ignore ZCCM's failed remediation efforts which have, *inter alia*, left waste dumps virtually uncovered so that airborne dust creates levels of lead emissions as bad as an active smelter.

449.5. Ignore ZCCM's introduction of contaminated soil as part of partial remediation efforts and its sale of contaminated houses to the public.

449.6. Ignore that, to this date, continued unregulated artisanal mining, smelting, and processing of slag in the areas around the Mine self-

[416] Taylor report para 7.1 p 001-1764.

[417] AA para 675 p 001-2913.

evidently causes lead exposure to the residents of Kabwe.

450. Most problematic for the applicants is that their own experts concede the inappropriateness of this basic assumption of linearity between production and pollution.[418] In what follows, we set out the reasons why the concession is properly made and destroys the applicants' primary case on causation.

451. First, it is common cause between the parties that ore processing and smelting methods improved over time. As the applicants' expert Prof Taylor concedes, it is "entirely reasonable to assume that mining and smelting processes and associated emissions varied over time, with the likelihood that processing became more efficient throughout the 20th century."[419] Thus, smelting became more efficient because of technological advances – it could produce more but emit less lead pollution. Great advances were made in air pollution control mechanisms that allowed them to be up to 99% effective in cleaning waste gasses.[420]

452. In the pre-1925 period, lead emissions were completely unconfined and uncontrolled. It is common cause that:

    452.1. This was a period of "relatively high emissions of lead".[421] The applicants' expert states that during this period the furnaces "must have emitted

[418] Betterton second report para 12.33 p 001-9638; Harrison second report para 7.34 p 001-9533.

[419] AA para 675 p 001-2913; Taylor report para 7 p 001-1764.

[420] Betterton report p 001-1625; AA paras 131.3 to 132 p 001-2716.

[421] RA para 190.1 p 001-7664.

prodigious amounts of lead fumes and dust into the environment."[422]

452.2. There were no emissions controls employed by the Mine.[423]

452.3. It accounts for 12% of the total lead produced by the Mine.[424]

452.4. Lead is immobile and remains in surface soil for decades – possibly centuries.[425]

453. According to Anglo's expert Mr Sharma, the operations undertaken at the plant during this time represent a key source of lead that has not been properly accounted for by the applicants.[426] The applicants accept Mr Sharma's conclusion that the lead and sinter emissions in the pre-1925 period:

> "are expected to have to have been more than three orders of magnitude higher than those in later periods, when air pollution controls had been installed and were operating."[427] (Emphasis added)

454. The applicants, in reply, concede that relatively high emissions of lead were likely to have occurred prior to 1925 but – in an extraordinary about-turn from their case in the founding affidavit – they argue (based on a new case made for the first time in reply) that due to the short stack heights in use at that time, "their impact is likely to have been primarily in the near vicinity of the works and too

[422] Betterton report pp 001-1624 to 001-1625.

[423] Betterton report pp 001-1624 to 001-1625.

[424] AA para 98 p 001-2706.

[425] AA para 103 p 001-2707; RA para 98 p 001-7626.

[426] Sharma first report p 001 – 3278.

[427] Sharma first report section 9.1 p 87 p 001-3318.

close to impact heavily upon the closest residential area."[428] By contrast, the case made out in the founding affidavit is that the mechanism for contamination in Kabwe was a fumigating and looping plume that would have delivered pollutants to the nearby residences from the plant and "the low height of the Kabwe smelter stacks would have been an essential element in this process."[429] We deal with this contradiction in section three.

455. The contradiction shows that the applicants would use any means to support an essentially untenable case that is at war with itself. In addition, there is no support, even in the applicants' own expert reports, for the suggestion that the "near vicinity of the works" does not include "the closest residential area", particularly where, after the relevant period, ZCCM and the Kabwe Municipal Council have allowed residential buildings to encroach ever more closely on the plant in areas which were previously off-limits.[430]

456. Second, the applicants' experts were forced to distance themselves from the assumption of linearity between production and pollution. Prof Betterton acknowledges in his reports that the question of how to apportion contribution of production during the relevant time to pollution is difficult, but strongly disassociates himself from the assumption of linearity. He states:

> "I did not directly link lead production to pollution levels as Mr George wrongfully claims. It will be difficult to accurately establish the link because of the significant changes in ore bodies mined, methods of concentrating and smelting, pollution control technologies employed, and maintenance

[428] RA para 190.1 p 001-7664.

[429] FA para 77 p 001-47.

[430] E.g. AA paras 581 to 584 pp 001-2878 to 001-2885.

> and management over the nearly 80-year lifetime of the Kabwe operations. I have not precisely apportioned the extent of pollution."[431]

457. Later in his report, Prof Betterton revisits this issue:

> "I did not state that lead pollution apportionment should be based solely on the mass of lead produced. I acknowledge that ore processing and smelting methods changed over time, as did pollution control measures, plant management and plant maintenance. Making apportionment on the basis of lead production alone is difficult."[432] (Emphasis added.)

458. While Prof Betterton correctly distances himself from the assumption of linearity, he continues to surmise – without offering any analysis, but simply conjecture – that the relevant period must have made a material contribution.[433] This is impermissible. The applicants are obliged to show the existence of a triable issue based on facts; not conjecture. And it is trite that an expert's opinion must be reasoned, not speculative.

459. Despite Prof Betterton's express disclaimer, the applicants persist in their heads of argument in advancing the linear extrapolation principle as established, reliable and accurate, and this theory forms a central pillar of their argument.[434] This approach – which involves picking and choosing the expert evidence that suits the applicants – is concerning.

460. Prof Harrison equally no longer asserts that lead pollution is "broadly

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[431] Betterton second report para 12.27 p 001-9632.

[432] Betterton second report para 12.33 p 001-9638.

[433] Betterton second report paras 11.1.1 and 11.1.2 pp 001-9611 to 001-9612.

[434] Compare e.g. applicants' HoA para 46.4.2 p 007-30: "Anglo was responsible for 66% of lead pollution over the lifetime of the Mine, resulting in a broadly commensurate level of lead pollution…"

commensurate" with lead production. He now concedes the following in his report filed with the replying affidavit:

> "I expressed the view that the only possible basis from which to apportion current lead pollution to the operators was in proportion to lead production totals over the relevant periods. Mr. Sharma brings forward evidence previously unavailable to me which challenges this view, particularly in relation to the operation of the plant after 1974 when Anglo's involvement ceased. I acknowledge that the use solely of lead production data is an inexact measure, but given the poor record of plant operational characteristics in terms of emissions, it is very hard to propose an alternative method."[435] (Emphases added)

461. Prof Harrison's acknowledgement elides the problem. It is not simply that the 66% theory is "inexact"; it is fundamentally logically flawed. The applicants simply cannot show the extent to which the relevant period contributed to the lead pollution over the life of the Mine. Moreover, the overwhelming likelihood on the papers is that:

    461.1. Whatever lead emissions occurred during the relevant period were not "guilty" lead, because the applicants have not shown that the work practices or emissions systems employed were unreasonable for their time; and

    461.2. The periods before and after the relevant period were vastly more pollutive, for the reasons set out above and below.

462. To counter the incontrovertible failures of ZCCM to prevent its unprotected lead

[435] Harrison second report para 7.34 pp 001-9533 to 001-9534.

emissions after 1974, the applicants argue that research by Dr Clark, Dr Lawrence and the Reillys shows that "Kabwe was already heavily polluted by 1974".[436] The attempt fails for two reasons:

462.1. First, this research could not (and did not seek to) apportion lead emitted before 1925 from that following 1925; and even less to apportion "guilty" lead from "innocent" lead emitted during the relevant period. The research simply found a degree of lead in the soil and in blood, wherever and whenever it may have originated. Importantly, the applicants have nowhere alleged, nor could they, that the lead found in this research all emanated during the relevant period or is more or less equal to the current contaminated state of Kabwe.

462.2. Second, the research focused on the immediate vicinity of the Mine which would have been contaminated by the pre-1925 lead blast furnaces. The research is meaningless in respect of the expansive geographical area covered by the applicants' class definition, i.e. the whole Kabwe district (1 570 km^2). We elaborate on this point.

463. Dr Clark's research focused on four townships within three km of the Mine. Dr Clark's own findings noted that his investigations showed that:

> "of the four communities situated within a radius of approximately 3 000 metres of the Kabwe mine smelter, only two, namely Kasanda and

[436] RA para 136 p 001-7637; Applicants' HoA paras 59 to 60 pp 007-35 to 007-36.

Makululu were exposed to a high atmospheric lead environment."[437] (Emphasis added)

464. According to Dr Clark, Kasanda at the time covered 650 000 square meters (or 0.65 km^2) and the centre of Kasanda was 2.2 km from the smelter stack.[438] Makululu was an area west of Kasanda and so it was also in the way of the prevailing wind.

465. The reliance on Dr Lawrence's research does not take their case further. Dr Lawrence says that he became concerned with the children of the workers that lived in the nearby township.[439] We know from Dr Clark's research that this was likely to have been children living in Kasanda, being the main residential area for the mineworkers (before certain mineworkers were relocated to Chowa at the Mine's behest after Dr Lawrence's research). Again, this research only concerned people living in the immediate vicinity of the Mine.

466. The research of the Reillys likewise centred on "the vicinity of the Broken Hill Lead and Zinc Mine, Kabwe*"* within a distance of approximately 1 km of the Kabwe smelter.[440] They also investigated "one important food plant from the Kabwe mine township".[441] The area equally had high levels of copper and zinc, all bearing on the "mineralized nature of the area".[442]

467. The research by Drs Clark and Lawrence or the Reillys does not support the

[437] Annexure ZMX3 p 001-482.

[438] Annexure ZMX3 p 001-382.

[439] Lawrence affidavit para 13 p 001-2551.

[440] Annexure ZMX77 p 001-1200.

[441] Annexure ZMX77 p 001-1201.

[442] Annexure ZMX77 p 001-1201.

applicants' conclusion that the Kabwe district, covering 1 570 km^2, was materially contaminated by the Mine. At best for the applicants, it shows that the soil in Kasanda and Makululu was contaminated – without showing that such contamination was caused by Anglo and did not flow from the copious pre-1925 pollution or from "innocent" emissions in the relevant period.

468. Under the rubric of legal causation below we show that incontrovertible evidence exists that ZCCM caused major lead pollution after 1974 and that artisanal lead mining in Kabwe continues to contribute to ongoing lead pollution. This evidence is equally relevant to the enquiry into factual causation.

Attribution of any material contribution between different sources of lead

469. The applicants acknowledge that, on their primary (material contribution) theory of factual causation "each actor will be liable for a pro-rata share of damages. A common-sense approach is required to such apportionment. This is particularly so when dealing with historical liability, where evidence may be difficult to come by."[443]

470. They fail to acknowledge that:

470.1. It is not only "guilty" lead that falls to be attributed and hence would reduce or extinguish any potential liability for Anglo. It is also "innocent" lead, including naturally-occurring lead, lead from any other non-smelter related sources, as well as lead emissions which occurred notwithstanding work practices or emissions technologies reasonable for

[443] Applicants' HoA para 441.

their time ("innocent" lead). That much is clear from *Bonnington.*

470.2. The nature of the exercise is not akin to apportionment, as it is known in South African law.[444] Persons who separately (but concurrently or cumulatively) made a material contribution to an injury are not joint wrongdoers for purposes of tort law. Liability is not joint and several.

471. In divisible injury cases (such as *Bonnington*), the defendant is liable only to the extent of his contribution and no more.[445] In *Holtby*,[446] the plaintiff, who worked as a marine fitter, was exposed to asbestos dust over a period of almost 40 years. For about half of that time he worked for the defendants, and for the remainder he worked for other employers doing the same sort of work in similar conditions. He developed asbestosis and sued the defendants, who were held to have been negligent and in breach of their statutory duty.

472. At first instance, the judge held that the defendants were only liable for the damage they had caused, the evidence indicating that if the plaintiff had only been exposed to asbestos whilst working at the defendants' premises, his condition would probably have been less severe. General damages were reduced by 25%. The plaintiff appealed on the basis that once he established that the defendant's breach of duty materially contributed to his damage he was entitled to recover for the full extent of his loss, applying *Bonnington*. Alternatively, the plaintiff argued that once a plaintiff has proved that the

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[444] Compare W*right v Medi-Clinic Ltd* 2007 (4) SA 327 (C).

[445] Gibson affidavit para 59 p 001-3957 with reference to *Dingle v Associated Newspapers Ltd* [1961] 2 Q.B. 162 at 189 and *Thompsons v Smiths Shiprepairs (North Shields) Ltd* [1984] QB 405.

[446] *Holtby v Brigham Cowan (Hull) Ltd* [2000] ICR 1086; [2000] 3 All ER 421.

defendant's conduct had made a material contribution to the damage, the onus shifted to the defendant to prove that someone else was responsible for a specific part of the damage.

473. The Court of Appeal rejected both arguments, upholding the judge's deduction of 25%. Stuart-Smith LJ held that in *Bonnington* the House of Lords had not considered the extent of the defendants' liability because it had not been argued that the defendants were only liable to the extent of their material contribution; their case had been that they were not liable at all. The onus of proof remained with the plaintiff to show that the defendant's tortious conduct made a material contribution to the loss, but strictly speaking the defendants were liable only to the extent of that contribution. He further held:

> "Certainly the matter must be raised and dealt with in evidence, otherwise the defendant is at risk that he will be held liable for everything. In reality I do not think that these cases should be determined on onus of proof. The question should be whether at the end of the day, and on consideration of all the evidence, the claimant has proved that the defendant is responsible for the whole or a quantifiable part of his disability. The question of quantification may be difficult and the court only has to do the best it can using its common sense, as Lord Salmon said in the passage cited. Cases of this sort, where the disease manifests itself many years after the exposure, present great problems, because much of the detail is inevitably lost. I can see that in Borel's case, 493 F.2d 1076 where the defendants were manufacturers as opposed to employers the position may be particularly difficult. But, in my view, the court must do the best it can to

> achieve justice, not only to the claimant but also to the defendant, and among defendants."[447] (Emphases added.)

474. In principle, the amount of the tortfeasor's liability will be limited to the extent of the contribution which its tortious conduct made to the injury complained of. The Court must do the best it can on the evidence to make the attribution.[448]

475. To sum up: In this matter, the factual causation enquiry shows that Anglo was not the "but for" cause of the class members' injuries. Neither did it make a material contribution to such injuries: the "common sense" inquiry referred to in *Holtby* and *Thompsons* reveals that the applicants failed to show, even on a *prima facie* basis, that any (guilty) lead emissions during the relevant period materially contributed to those alleged injuries, given the overwhelming contributions of the periods before and after the relevant period, and the role of other sources of lead (including "innocent" lead emitted during the relevant period).

476. Under the rubric of legal causation we show that, even if "guilty" emissions during the relevant period made a material contribution to the class members' injuries, considerations of remoteness, foreseeability and the reckless conduct of ZCCM militate against attributing such injuries causally to Anglo at all.

Legal causation

477. Damage which is too remote is not recoverable, even if there is a factual link

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[447] *Holtby v Brigham Cowan (Hull) Ltd* [2000] ICR 1086; [2000] 3 All ER 421 at para 20.

[448] Gibson affidavit para 55 pp 001-3955 to 001-3956 with reference to *Allen v British Rail Engineering Ltd* [2001] ICR 942 at para 20.

between the breach of duty and the loss. Since causal chains may extend in eternity and ripple out in unpredictable ways, the law guards against indeterminate liability. The remoteness test is, therefore, a control mechanism against the imposition of unfair liability on a defendant.

The English law on remoteness, foreseeability and *novus actus interveniens*

478. In English law the concept of remoteness attempts to ensure that plaintiffs are only compensated for *"*the proximate and direct consequences of wrongful acts*"*.[449] In short, some damage, though it might proceed directly from a negligent act, is too remote from the act reasonably to hold the tortfeasor responsible for it.[450]

479. The relevant touchstone where the wrongful conduct is merely negligent[451] is foreseeability, and the basic test is that set out by the Privy Council in *The Wagon Mound (No.1)*.[452] In that case, the Privy Council overturned the longstanding authority of *Re Polemis* [1921] 3 KB 560 which had held that "direct" consequences of an act, however unforeseeable, were recoverable.

480. *The Wagon Mound (No.1)* harmonised the principles of causation with those of duty of care, by placing foreseeability at the heart of the law on remoteness; the essential factor in determining liability was whether the damage is of such a kind

[449] *Lumley v Gye* 118 E.R. 749, at 252.

[450] Gibson affidavit para 90 p 3968.

[451] As opposed to conduct which was intended to cause a particular consequence, in which respect such consequence can never be too remote (*Quinn v Leathem* [1901] AC 495).

[452] *Overseas Tankship (UK) Ltd v Morts Dock & Engineering Co (The Wagon Mound)* [1961] AC 388.

as the reasonable person should have foreseen.[453] If the risk of damage would have been regarded as a possibility by the reasonable person, i.e. a "real risk", then the risk was foreseeable and hence not too remote.[454]

481. Foreseeability in the remoteness context is similar, but more granular than in its application in the duty of care analysis. The text on English tort law to which both parties' English law experts referred extensively states as follows:

> "The function of a test of remoteness is to set an outer limit to the damage for which the defendant will be held responsible. The possible consequences of any human conduct are potentially endless. The defendant's wrongdoing may trigger a series of events stretching well beyond one's normal expectations of possible consequences. The law does not, however, impose indefinite liability. A line must be drawn to confine the responsibility of the defendant to those consequences of his wrongdoing which it is proper for him to shoulder. Thus, even when it is quite clear that the defendant's wrong caused the damage, it may be said that the damage was too remote if it is not of the same type as would normally be anticipated in similar circumstances, or if it occurred in an unusual way. Remoteness of damage places limits on the defendant's responsibility, and in the context of the tort of negligence there is a significant overlap between the concepts of remoteness of damage and duty of care, which is also concerned with setting out the boundaries of liability for careless conduct."[455]
>
> *"*Given that a defendant found to be in breach of a duty of care must be taken to have foreseen some form of damage to the claimant, the remoteness test is concerned with the outer limits of a defendant's responsibility for causing damage where that damage has occurred in an unusual or unexpected way, or is of a type different from that which the

[453] See, e.g., *The Wagon Mound (No.1)* [1961] AC 388, per Viscount Simonds at 425.

[454] *Overseas Tankship (UK) Ltd v Miller Steamship Co Pty Ltd (The Wagon Mound)* [1967] 1 AC 617.

[455] *Clerk & Lindsell (*23rd Ed.) at 2-144.

[defendant] ought reasonably to have foreseen as part and parcel of being held to be in breach of duty."[456] (Emphases added.)

482. Thus, where injury has come about in an unusual or unexpected way, or is of a type different from that which the defendant ought reasonably to have foreseen as part and parcel of being held to be in breach of duty, the injury is too remote to hold the defendant responsible as the cause in law of the injury. As we show below, this is eminently the case here, where the damage came about through ZCCM's reckless conduct in producing lead without effective (or, at times, any) pollution controls; and where ZCCM failed to remediate but indeed, through its conduct subsequent to 1994, exacerbated class members' injuries it caused in the first place.

483. Further, in cases where some act which occurred years or decades previously has caused damage which has only arisen or become apparent later, the test of foreseeability is that of what was reasonably foreseeable at the time of the act.[457]

484. Equally, where the type of damage caused was not foreseeable at the point in time when the breach of duty occurred, the defendant would not be held liable. Examples from other toxic tort cases (which we also refer to above in the context of the duty of care analysis) are instructive:

484.1. In *Cambridge Water Co*, the plaintiff sought to hold the defendant liable in negligence and nuisance for spillages of PCE solvent in 1976 which,

[456] *Clerk & Lindsell* (23rd Ed.) at 2-153.

[457] *Pratley v. Surrey County Council* [2004] ICR 159; *Williams v University of Birmingham* [2011] EWCA Civ 1242.

in 1991 (some 15 years later), caused damage to an aquafer. In this case Lord Goff held:

> "But it by no means follows that the defendant should be held liable for damage of a type which he could not reasonably foresee; and the development of the law of negligence in the past 60 years points strongly towards a requirement that such foreseeability should be a prerequisite of liability in damages for nuisance, as it is of liability in negligence."[458]

484.2. Similarly, in *Savage*, because it would not have been foreseeable in 1991 that the creation of nitrates in the ground by the application of pig manure would pollute the plaintiff's water supply in the future, no liability in nuisance was found.[459]

485. It is not correct, as the applicants state, that the "type of damage" that must be reasonably foreseeable can just be any personal injury from lead exposure (i.e. the applicants pitch "type of damage" at a high level of abstraction).[460] This is illustrated by *Doughty*:[461]

485.1. In this case, Mr Doughty was injured when another employee of the defendant accidentally knocked a container cover which resulted in asbestos cement falling into a nearby vat of molten liquid. The exposure of the asbestos to the very high temperatures resulted in a chemical reaction with water as a by-product. The introduction of large quantities

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[458] *Cambridge Water Co Ltd v Eastern Counties Leather plc* [1994] 2 AC 264.

[459] *Savage v Fairclough* [2000] Env. L.R. 183.

[460] Applicants' HoA para 498 p 007-220.

[461] *Doughty v Turner Manufacturing Co. Ltd* [1964] 1 QB 518.

of water within the molten liquid caused an eruption of steam, injuring Mr Doughty. Mr Doughty contended that whilst the exact way in which his injury came about was not foreseeable, a personal injury was.

485.2. The Court of Appeal held that the defendants were not liable. The events failed the remoteness test, in that the reasonable person would not have foreseen an eruption of steam. Whilst the plaintiff submitted that splashing from the molten liquid was a foreseeable and comparable occurrence, the Court disagreed. It found that the accident was unforeseeable, because while splashing (causing personal injury) was foreseeable, the eruption caused by the chemical reaction (also causing personal injury) was unpredictable and hence not foreseeable.

486. Once it is established that the damage sustained by the plaintiff was foreseeable, the likelihood that it would have occurred is irrelevant. It is enough to show that the possibility of the damage would have occurred to the reasonable person as a realistic (i.e. not a "far-fetched") possibility.[462]

487. Where the defendant's conduct forms part of a sequence of events leading to harm to the plaintiff, and the act of another person, without which the damage would not have occurred, intervenes between the defendant's wrongful conduct and the damage, the court has to decide whether the defendant remains responsible or whether the act constitutes a *novus actus interveniens*, i.e.

[462] See *The Wagon Mound (No.2)* [1967] 1 AC 617, at 643:

> "If a real risk is one which would occur to the mind of a reasonable man in the position of the defendant's servant and which he would not brush aside as far-fetched, and if the criterion is to be what that reasonable man would have done in the circumstances, then surely he would not neglect such a risk if action to eliminate it presented no difficulty, involved no disadvantage, and required no expense."

whether it can be regarded as breaking the causal connection between the wrong and the damage.[463]

488. The doctrine of *novus actus interveniens* finds application where the defendant's conduct may have satisfied the "but for" test, in the sense that without its wrongful conduct the damage would not have occurred. But this, in itself, is not determinative of whether the defendant should be held responsible where other causally relevant events have played a role. In the majority of cases where a plea of *novus actus* succeeds, there will have been a prior finding that the original wrongdoing does indeed satisfy the "but for" test of factual causation. It is a cause of the damage. On grounds of equity and policy, the court then proceeds to determine whether, in the light of subsequent events, the defendant should not be held answerable for consequences beyond his control.[464]

489. The underlying principle for the plea of *novus actus* was described by Lord Bingham in *Corr* as being fairness:

> "It is not fair to hold a tortfeasor liable, however gross his breach of duty may be, for damage caused to the claimant not by the tortfeasor's breach of duty but by some independent, supervening cause (which may or may not be tortious) for which the tortfeasor is not responsible."[465]

490. The Courts have used various metaphors to describe when A will not be held responsible for injury to C, despite A's conduct being a "but for" cause of C's

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[463] Gibson affidavit para 97 p 001-3970.

[464] *Clerk & Lindsell on Torts* (23rd Ed.) at 2-110. See also *Rouse v Squires* [1973] 1 Q.B. 889 at 898 and *Wright v* Lodge [1993] 4 All E.R. 299.

[465] *Corr v IBC Vehicles Ltd* [2008) 1 AC 884 at para 15.

injury:

490.1. B snaps the chain of causation;

490.2. B is no mere conduit pipe through which consequences flow from A to C;

490.3. B is no mere moving part in a transmission gear set in motion by A; and

490.4. B insulates A from C.[466]

491. No precise or consistent test is available to define when the intervening conduct of a third party will constitute a *novus actus interveniens* sufficient to relieve the defendant of liability for his original wrongdoing. The question of the effect of a *novus actus* "can only be answered on a consideration of all the circumstances and, in particular, the quality of that later act or event". Four issues need to be addressed:

491.1. Was the intervening conduct of the third party such as to render the original wrongdoing merely a part of the history of events?

491.2. Was the third party's conduct either deliberate or wholly unreasonable?

491.3. Was the intervention foreseeable?

491.4. Is the conduct of the third party wholly independent of the defendant, i.e. does the defendant owe the plaintiff any responsibility for the conduct of

[466] *Weld-Blundell v Stephens* [1920] A.C. 956 per Lord Sumner at 986.

that intervening third party?

492. In practice, in most cases of *novus actus* more than one of the above issues will have to be considered together.[467]

493. English Courts accordingly explore two main issues when considering whether the "chain of causation" was broken:

493.1. Was the intervening act "reasonable" in the circumstances? In this context "reasonable" refers to the voluntariness of the act – not whether it was careless. The more voluntary the act, the less reasonable it is, and the more potent its causative effect.[468]For example, in *The Oropesa* [1943] P. 32 it was said that a *novus actus* is *"*something which can be described as either unreasonable or extraneous or extrinsic. I doubt whether the law can be stated more precisely than that*."*[469]

493.2. Was the intervening act foreseeable? Acts that were foreseeable – even if they were deliberate or even criminal – do not always amount to a *novus actus*. Yet, the foreseeability of an intervening act will not, alone, determine whether an intervening act is a *novus actus*.[470]

494. If the defendant was under a duty to prevent the very intervention that occurred, he cannot complain that that intervention broke the causal link, since that would

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[467] *Clerk & Lindsell on Torts* (23rd Ed.) at 2–114.

[468] See *Clerk & Lindsell on Torts* (23rd Ed.) at 2–117 ff.

[469] Per Lord Wright at p.39.

[470] Gibson affidavit para 101.2 p 001-3972.

render the duty ineffective.[471] (It stands to reason that there was no way in which Anglo could have prevented ZCCM running down the ISF, operating it without functional electrostatic precipitator, flouting its remediation obligations, or selling of contaminated land piecemeal.)

495. Intervening omissions are, generally, less likely to constitute a *novus actus interveniens*. Where the intervening conduct consists of a negligent failure to prevent damage caused by the defendant's wrong, it may not constitute a *novus actus.* A negligent omission has no causative effect unless it was *"*a wholly independent cause of the damage, i.e. a *novus actus interveniens".*[472]

496. In this case, we submit that ZCCM's reckless emissions between 1974 and 1994, as well as its reckless conduct after that, in failing to remediate but in fact exacerbating lead pollution in Kabwe, renders any potentially negligent acts by Anglo entirely remote from the damage – both because such conduct by ZCCM was not foreseeable by Anglo, was entirely unreasonable (and indeed reckless) and because it constitutes a series of intervening acts and omissions committed with foresight of the danger and thus breaking the causal chain.

497. In dealing with ZCCM's conduct, we emphasise that the applicants do not quibble that, factually, ZCCM engaged in the conduct set out in Anglo's answering affidavit from 1974 to the present.[473] That evidence is common cause. The applicants merely seek to characterise ZCCM's conduct as a continuation and

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[471] See *Reeves v Commissioner of Police for the Metropolis* [2000] 1 A.C. 360 at 367–368, per Lord Hoffmann.

[472] Gibson affidavit para 102 p 001-3973 quoting Goff LJ in *Muirhead v Industrial Tank Specialities Ltd* [1986] Q.B. 507 at 533.

[473] AA paras 163-624 pp 001-2727 to 001-2897.

mirror image of the Mine's conduct during the relevant period, and hence not remote or unforeseeable. We return to those issues after explaining why ZCCM is solely liable, both in fact and in law, for the class members' injuries.

ZCCM's reckless emissions of lead pollution between 1974 and 1994 caused the injury

498. Between 1974 and 1994, the Mine's productivity declined.[474] The Mine's dwindling productivity was a function of lower commodity prices and the challenges faced by ZCCM in finding a profitable way to treat the changing ores.[475] The result was that the Mine was in a marginally profitable or loss-making position for much of this period.

499. A rapid decline in the quality of the Mine's operations began as early as 1975 – 1976 when NCCM's annual report states that the Mine was being operated without adequate skills and that this was impacting the general standard of maintenance.[476]

500. In the 1980s, ZCCM was trying to conserve cash and particularly forex reserves by not buying new parts and by not carrying out required maintenance – seemingly in the expectation that the Mine would be closed imminently.[477]

501. This meant that ZCCM quite literally and by its own admission, "ran down" the Mine and ISF /sinter plant as it increasingly became uneconomical, and it was

[474] AA para 176 p 001-2730.

[475] AA para 177 p 001-2731.

[476] AA para 001-2745; Annexure AA28 p 001-4394. The Annual Report (p 001-4397) further stated that there was a "shortage of experienced engineering labour in various trades has badly affected the standard of general maintenance work and affected plant performance adversely."

[477] AA para 179 p 001-2732.

nearing the end of its life.[478] It did so with full knowledge of the legal consequences of its reckless behaviour. A handwritten note on minutes of a 1989 meeting of its environmental task force recorded:

> "How culpable are we? Legal standing/view. Complainants. Advisable to settle out of court. So far only one case. Death certificate – care must be taken. We are culpable from operations point of view. Nature of operations / serious situation / potential is there. Precipitators – why did we run down the Plant for long. Problem is there even when the sinter plant is closed. 20-30 years hence. Dumps. Dust."[479] (Emphasis added)

502. There were problems with the ISF/sinter plant which had become worse by 1980.[480] Reference is made in the Minutes of the General Manager of the Mine to a Robson Report of 1981 that had "condemned the Sinter Plant."[481]

503. By 1984, ambient lead levels – as recorded in Kasanda – were 800% higher than the safety limit set by the World Health Organisation. The ambient levels subsided later that year but rose again in 1985 when the precipitator at the ISF/sinter plant became non-operational.[482] In contrast, the applicants cannot show any aerosol data which shows that, during the relevant period, ambient lead levels exceeded any limits: both because such data does not exist, but also because such limits did not exist.

504. The deterioration of ambient air quality because of the non-operational

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[478] AA para 205 p001-2745.

[479] AA para 241 p 001-2757; Annexure AA32 pp 001-4444 to 001-4449.

[480] AA para 208 referring to Annexure AA29 p 001-4417.

[481] AA para 212.2 p 001-2747; AA32 p 001-4444.

[482] AA para 209 p 001-2746.

precipitator at the ISF/sinter plant was repeatedly reported in the T*imes of Zambia.* Minutes of the Mine's meetings discussed an article dated 16 March 1989, in which it was recorded that the issue of pollution at the Mine was well-known, especially at the ISF/sinter plant. The Minutes further noted that, given the collapse of the bottom of the "non-functional electrostatic precipitator at the Sinter Plant", management was looking into routing gasses into the main stack.[483]

505. This obviously caused emissions high in lead content to escape untreated from the main stack, as conceded by Prof Betterton[484], at a time when ZCCM knew the consequences of its decision to community lead exposure but chose to reconcile itself with such consequences.

506. Repeated undertakings by the Mine's management to install new air pollution control devices to remedy the pollution did not materialise, as ambient lead-in-air levels in Kasanda continued to rise.[485] Similarly, repeated commitments eventually to close the ISF/sinter plant were continually pushed out. Initially, the ISF/sinter plant was to be closed by the end of 1990.[486] It was not closed until 1994.

507. By its closure, ZCCM had been operating the Mine's lead smelter for at least twelve years without adequate emissions control and for five years without any.

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[483] AA para 212 p 001-2747; AA32 p 001-4444.

[484] Betterton second report para 11.2.15 p 001-9623.

[485] AA para 215 p 001-2749.

[486] AA para 216 p 001-2749.

Contemporaneous evidence shows that this had devastating consequences:

507.1. The measured air concentration in Kasanda (meaning the real-time aerosol data taken at the time of the malfunctioning ISF/sinter plant in Kabwe) showed that lead air concentrations were substantially higher in the 1980s and 1990s than measured by Clark in 1973-1974.[487]

507.2. The available lead concentration measures suggest that the lead concentrates in the air increased after 1974 and that air quality was most impacted prior to and immediately after closure of the Mine in 1994. Concentrations of lead in air in Kasanda township, downwind from the Mine, were more than ten-fold greater in 1984 than in 1974.[488]

507.3. Dust monitoring results in December 1994, taken after the Kabwe plant closed down, were five to nearly thirty-fold higher than concentrations reported in 1975 when the ISF smelter was operating efficiently.[489]

507.4. Approximately 7% of total lead was produced from 1985 to 1994, while emissions control was not in use. These emissions are comparable to the uncontrolled emissions of the pre-1925 blast furnaces.[490]

508. ZCCM frankly acknowledged that the period between 1989 to 1991 was most likely the worst period of lead pollution in the history of the Mine. In a ZCCM memo, dated 28 August 1996 under the heading “lead in blood – historical

[487] AA para 223.1 p 001-2752.

[488] AA para 13 p 001-2677.

[489] AA para 14 p 001-2677; Sharma first report section 6.2.1 p 001-3297.

[490] AA para 223.2 p 001-2752.

comparison" it stated that:

> "In 1984 Ambient lead levels, as recorded from the sampling point at Kasanda, were 800% higher than the 0.02 ug/cubic meters safety limit set by the World Health Organisation. The Ambient levels subsided later that year but rose again in 1985 when the Electrostatic Precipitator at the Sinter Plant became non-operational but continued to be used to convey fumes to the main stack. The collapse of the base of the Electrostatic Precipitator in 10 January 1989 and its subsequent removal and non-replacement from the discharge circuit, significantly increased the discharge of fumes further and at lower height levels. This meant high concentrations of lead being projected and setting into the mine townships.
>
> Hence the period between 1989 – 1991 (for which sufficient data was located) most likely represents the worst period of lead pollution, in the history of the Kabwe Mine, and is marked by an increase in blood lead levels of 20 – 100% from the 1983 levels, for the age group of 0 – 5 years old in Chowa and Kasanda." [491] (Emphases added.)

The applicants' response to ZCCM's obvious, and acknowledged, liability

509. Surprisingly, the applicants downplay the significant deterioration of the ISF/sinter plant and ZCCM's decision to continue to operate the ISF/sinter plant without air emissions controls. In this regard, the applicants' approach to the acknowledged liability by ZCCM, in crystal clear memoranda and reports, stand in marked contrast to their grasping case regarding the relevant period resting on obscure, or distorted, snippets from documents that have nothing to do with Anglo.

[491] AA para 253 pp 001-2760 to 001-2761.

510. The applicants' retort rests on four legs:

510.1. First, the bald and misleading allegation that problems with the precipitator were already common under Anglo's watch when levels of lead production were far higher.

510.2. Second, the offset argument – that the rate of emissions while the electrostatic precipitator was not functioning was effectively offset by the marked drop in lead production during this period.[492]

510.3. Third, the contained emissions argument – that the collapse of the bottom of the electrostatic precipitator in 1986 meant that lead dust escaped from a much lower altitude and was thus restricted to the "immediate vicinity of the Kabwe Plant rather than making it widespread across the Kabwe district".[493]

510.4. Fourth, and most telling – considering the evidence showing that lead in air concentrations in Kasanda were more than 10-fold greater in 1984 (measured by ZCCM) than in 1974 (measured by Dr Clark) – the applicant now argues, in reply, that "there is reason to believe that the average lead in air concentrations…reported by Clark may be a substantial underestimate."[494]

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[492] RA para 151 p 001-7646; Betterton second report para 11.2.17 p 001-9624; Applicants' HoA paras 452.2 and 452.3 pp 007-202 to 007-203.

[493] RA para 151.2 p 001-7646; Betterton second report para 11.2.15 pp 001-9623 to 001-9624; applicants' HoA para 452.4 p 007-203.

[494] RA para 161.2 p 001-7650; Harrison second report paras 7.36 to 7.37; applicants' HoA para 453 pp 007-203 to 007-204.

511. The applicants argue that problems with the precipitator were already common under Anglo's watch when levels of lead production were far higher.[495] They reference their expert Prof Harrison, who contends that the monthly reports list frequent problems with the electrostatic precipitator during the operation of the ISF, which has led him to conclude that it was not operating effectively.[496]

512. Given the weight placed by the applicants on this conclusion, one would have expected that Prof Harrison would have detailed which monthly reports list "frequent problems" with the electrostatic precipitator; over how long a period these monthly reports recorded the problems; what were the problems were; and to what extent did they affect the functioning of the electrostatic precipitator. Surely such information ought to have been provided to Prof Harrison to support his conclusion that the electrostatic precipitator was not operating effectively for much of this time? If so, none of the information purportedly relied upon by Prof Harrison to draw this conclusion is made available to Anglo or the Court in order to meaningfully engage with the bald conclusion.

513. In fact, read in context, what Prof Harrison states is this:

> "There appear also to have been large potential losses from the sinter plant of the later ISF process. Barlin…refers to monthly losses of lead of 142 tonnes (55 g/s) in 1969, although this may have been largely captured by the electrostatic precipitator…The monthly reports list frequent problems with the Cottrell electrostatic precipitator, which lead me to the conclusion that it was not operating effectively for much of the time."[497]

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[495] Applicants' HoA para 452.1 p 007-202.

[496] Harrison second expert report p 001-9537; RA para 126.3 p 001-763.

[497] Harrison second expert report p 001-9537.

514. What Prof Harrison states that is any potential lead losses may have largely been captured by the electrostatic precipitator. Then, without providing any justification or evidence, Prof Harrison makes a wide and sweeping conclusion that the electrostatic precipitator was not "operating effectively". Given the absence of any information to support this conclusion, it must be seen for what it is – a superficial and unfounded attempt to neutralise any suggestion that the electrostatic precipitator performed as expected during the relevant period.

515. The offset argument is both factually and logically flawed. ZCCM's own committees expressed their concerns about the serious environmental implications of the rising lead emissions even though lead production was dropping. In fact, the environmental task force minutes of 21 March 1991, noted that "despite the low rate of production of the ISF, ambient lead levels in Kasanda were as high as ever."[498] (Emphasis added.)

516. In addition, the applicants' own expert, Prof Betterton' concedes that a collapse in a component of the electrostatic precipitator "would have led to the significant increase in the sinter plant dust emissions from the top of the stack" which he states he could not quantify.[499]

517. The contained emissions argument does not advance the applicants' case either. The argument rests on Prof Betterton's view that the collapse in the base of the electrostatic precipitator would have resulted in emissions being deposited in the immediate vicinity of the Kabwe plant. The applicants do not quote the full context

[498] AA para 219.1 p 001-2750; Annexure AA39 p 001-4473.

[499] Betterton second report para 11.2.15 p 001-9623.

in which he expresses this view, which confirms rather than avoids the conclusion that the ISF was significantly more pollutive during ZCCM's operations:

> "It is true that during the post-Anglo operation period, the electrostatic precipitator controlling emissions from the sinter plant failed in about 1985 (EAB19). It is possible that an internal component might have failed allowing emissions to be vented to the atmosphere via the stack using the body of the electrostatic precipitator to simply convey the dust. This would have led to a significant increase in sinter plant dust emissions from the top of the stack, but I am not able to quantify the increase without further information. In about 1989, a second failure occurred when the bottom of the electrostatic precipitator collapsed apparently allowing dust to escape from a much lower altitude than via the stack (EAB19). This would have had the effect of allowing the already high emissions to escape from near ground level thus restricting atmospheric transport and deposition to the immediate vicinity of the Kabwe plant rather than making it widespread across the Kabwe district. These two events would have caused higher emissions via the stack from about 1985 to 1986, and then from about 1989 to 1994 when mining/smelting operations ceased. However, it is not possible to accurately quantify the emissions increase due to the electrostatic precipitator failure because I lack the necessary information."[500]

518. In any event, it stands to reason that higher emissions in the "immediate vicinity of the Kabwe plant rather than … widespread across the Kabwe district" (in Prof Betterton's own words) would have disproportionately impacted the areas (namely Kasanda, Makululu and Chowa) which the applicants consider to be the worst-affected areas. It lends further credence to the fact that, in the geographical

[500] Betterton second report para 11.2.15 p 001-9623.

areas where class members suffered injury, that injury was caused by ZCCM.

519. The surprising attempt in reply to discredit Dr Clark, who was called in aid of the applicants' case in the founding affidavit, rests upon Prof Harrison's conjecture and speculation that there were periods when Dr Clark's air sampler was not working; the air sampler used by Dr Clark was inefficient; and the extraction acid used by Dr Clark resulted in an underestimation of the true concentration.[501]

520. However, as Mr Sharma explains:

520.1. Dr Clark reported air monitoring data collected over 15 months (April 1973 to July 1974) at a sampling station located adjacent to Kasanda. The annual average lead concentration was 8.2 µg/m^3 with monthly averages ranging from 2 to 18 µg/m^3 during this time, which was immediately before the end of the relevant period.[502]

520.2. Dr Clark's data provide the only air quality measurements for this period for Kasanda and Makululu.

520.3. While there may be some differences in the sample collection and measurement methods that were used by Dr Clark, compared to more recent methodologies, Dr Clark's data set is the only contemporaneous data set that has described its methodology and presented averaged concentrations over time.[503]

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[501] Harrison second report paras 7.36 to 7.42 pp 001-9534 to 001-9536.

[502] Sharma second report section 4.2.1 p 006-211.

[503] Sharma second report section 4.2.1 p 006-211.

521. The applicants cannot re-engineer contemporaneous evidence of lead in air concentrations simply because the results do not suit their narrative in this litigation. The suggestion that Dr Clark's data underestimated lead-in-air concentrations arises for the first time in reply, while the applicants were content to cite Dr Clark's research in their founding papers for propositions that suited their case. The applicants in any event have no proper basis to dispute the alarming 1984 lead in air concentrations. These, in themselves, are indicative of lead emissions sufficient to cause the class members' current injuries.

ZCCM's continued reckless conduct from 1994 to now exacerbated the danger

522. By 1989, it was crystal clear to ZCCM that it was liable to compensate anyone from the surrounding communities who came forward with claims arising from lead exposure. It was preparing to settle any case that came about through death or any other damage. This is evident from the environmental task force minutes on 18 May 1989, which showed that the following was recorded under the topic "Death/Damage Through Lead Poisoning":

> "After some lengthy discussion on whether or not the division was culpable on the question of lead poisoning, the meeting resolved that <u>if a complainant brought a legal claim it would be most logical to settle the matter out of court.</u>"[504] (Emphasis added)

523. Notwithstanding this knowledge, ZCCM continued its pattern of reckless conduct after the Mine was closed in 1994:

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[504] AA para 244 p 001-2760; Annexure AA34 p 001-4452.

523.1. It consciously failed to adequately implement its formal decommissioning plan for the Mine and the waste dumps, instead seeking to commercialise these assets in ways which continue to pollute Kabwe today.

523.2. It backfilled a sedimentation pond on the Mine site, leading contaminated debris to float in the Kabwe Canal through Chowa.

523.3. It introduced contaminated soil as a partial attempt to remediate certain houses.

523.4. It sold off its polluted housing stock in circumstances where it knew (and documented) that the only way to avoid danger to the community would be to demolish them.

523.5. Once international attention turned to Kabwe, between 2003 and 2011, it failed adequately to implement remediation plans funded by the World Bank, preferring cheap quick fixes to permanent solutions and discontinuing whatever measures were taken once international funding ceased.

523.6. After 2011, it passively acquiesced in continued and spiralling consequences from lead contamination, leading to an international outcry and renewed efforts to remediate, now lead by the Zambian government.

523.7. As a result, the Mine site and surrounding waste dumps remain heavily polluted today. The pollution is still conveyed to the community primarily

through airborne dust and the disintegrating Kabwe Canal. New operators and artisanal miners have taken up lead (and other) mining and smelting activities, perpetuating the cycle of pollution.

524. We deal with each of these reckless acts and omissions before we explain why they were unforeseeable to Anglo, and constituted intervening events breaking the causal chain and render any damage allegedly caused by the Mine before 1974 remote.

The failure to remediate; the reckless commercialisation of the Mine; and the introduction of further contamination through the Kabwe Canal and contaminated soil

525. In the lead-up to the closure of the Mine, ZCCM engaged international experts to assist ZCCM in developing a decommissioning and rehabilitation plan, i.e. the 1995 Decommissioning Plan.[505]

526. The 1995 Decommissioning Plan was extensive. It made findings and the recommendations in relation to the mine workings, the waste dumps and the impact of lead on the health of the surrounding community:

526.1. The 1995 Decommissioning Plan recommended that "ZCCM will carry out annual inspections of the fenced-off workings and present an annual report to the Minister of Mines and Minerals Development for a period of ten years."[506] (Emphasis added.)

[505] AA para 276 p 001- 2769.

[506] AA para 281 p 001 -2771; Annexure AA54 paragraph 6.1.1 p 001-4749.

526.2. In relation to the waste dumps, the Decommissioning Plan identified that the waste dumps had the waste products from the different metallurgical processes over the 90-year life of the Kabwe mine. They covered an area of about 1 square kilometre and had a maximum height of 8 m. The total amount of waste that it contained was approximately 8 million tonnes.[507] The surface layer of the waste dumps was loose and therefore accounted for much of the fugitive dust affecting Kasanda.[508]

527. The 1995 Decommissioning Plan acknowledged that Kasanda had been most affected by the air emissions from the plant and by fugitive dust from the waste dump area, and that ZCCM have been aware of the potential for soil contamination since 1975.[509]

528. The 1995 Decommissioning Plan recommended that the rehabilitation of the waste dumps should take place in two stages allowing for short-term measures (like surface contouring and removing impediments to surface drainage)[510] and long-term measures (like sloping, flattening and controlling of the leachates that seep from the dump and might affect the water quality in the natural environment).[511] These measures were necessary as it was acknowledged that the waste dumps would be *"*a hazard to the public and probably affect the health of persons living primarily in Kasanda township*."*

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[507] AA para 282 p 001-2771; Figure 2.1 and the plan entitled "*Waste Dump Plan*" in Annexure AA54.

[508] AA para 283 p 001-2773; Annexure AA54 p 001-4720.

[509] AA para 285 p 001-2773; AA54 p 001-4731.

[510] AA para 287 p 001- 2773.

[511] AA para 287 pp 001-2773 to 001-2774.

529. In relation to the impact of lead on the health of Kabwe's residents, the 1995 Decommissioning Plan noted that ZCCM had conducted numerous environmental studies for the development of the Plan. The results of the studies showed *inter alia* lead to be elevated in the soil for about 3 km west of the Mine; there were high measures of lead in the air samples obtained from Kasanda township and there were high levels of lead in the blood of residents of Kasanda, Chowa, Mukobeko, and Lukanga townships.[512]

530. Importantly, an expert report attached to the 1995 Decommissioning Plan entitled "*Environmental Lead Exposure and Human Health Near the Kabwe Smelter*" by Dr Clyde Hertzman made several important recommendations to decrease the BLLs of children living near the Mine:

530.1. First, he explained that ZCCM must proceed with the plan to control fugitive emissions from the tailings pile as soon as possible;

530.2. Second, he explained that beyond controlling fugitive dust from the tailings pile, other strategies that should be considered include replacing soil in play areas, domestic outdoor working areas, and rape-growing soil, improving house dust cleaning, reducing road dust, carrying out public education campaigns; and

530.3. Third, to annually sample the BLLs of children under 5 in Kasanda and Chowa and use these BLLs as a measure of success or otherwise of the aforementioned interventions (page 12). He explained that "this will be

[512] AA para 288.1 p 001-2775.

the most important group from the standpoint of estimating the long-term success of the remediation strategy. The objective should be to reduce the blood lead levels among this group in Kasanda and Chowa so that they are no higher than in the unexposed communities. It should be possible to accomplish this in 5 years which, I understand, is the time period planned for decommissioning the site."[513] (Emphasis added.)

531. Thus, the 1995 Decommissioning Plan set out a full roadmap for the remediation ZCCM was required to do, including the consequences – especially for the children of Kabwe – should they fail to implement it. The advice ZCCM received from its expert, Dr Hertzman, was consistent with experience in smelter communities around the world, built up from the 1970s, that proper decommissioning would bring down BLLs within five years (from 1995) to levels no higher than the background levels in unpolluted areas.[514]

532. However, instead of remediating, ZCCM took a commercial decision rather to monetise its assets in Kabwe:

532.1. A report from the Divisional Environmental Services Officer ("DESO draft 2 report") from around 1996 noted that industrial developments had already commenced in the plant area. It further advised that "[a]ny plans for an investor to use the dumps as raw material or the production of lead or zinc at the plant area should be revisited, especially where there is the

[513] AA para 288.2 p 001-2775. The Hertzman Report is contained within Annexure AA55, starting on p 001-4838.

[514] AA para 290 p 001-2776.

possibility [of] generating dust as the dumps are recovered."[515]

532.2. In August 1996, the ZCCM environmental services officer noted that one of the investors were currently using some of the building on the site as accommodation. He further noted that, "The high lead in soil is a result of ZCCMs previous mining operations. It is unfortunate that QMEL-COLOSSAL made no effort to remedial [sic] the site … However, legally the onus is still with ZCCM as at the point of sale there was no transfer of environmental liability…"[516]

532.3. The implementation of the 1995 Decommissioning Plan stalled as ZCCM tried to engage with new investors. Minutes of Meetings with investors show that – since the closure of the Mine – very little had been done by way of rehabilitation and remediation. In addition, "scavenging" on the site had now commenced.[517]

532.4. A meeting held on 9 April 1997 noted that ZCCM had – in the absence of an appropriate engineered cover for the mine dumps – resolved to get rid of ordinary garden waste on the dump to see if that would encourage vegetation.[518] The Minute also noted that the new investors had started to compound the problem by adding their own slag to the mine dumps.[519]

533. ZCCM's abject failure to implement the roadmap in the 1995 Decommissioning

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[515] AA para 298 p 001-2779; para 306 p 001-2783; Annexure AA30 pp 001-4418 to 001-4427.

[516] AA para 316 pp 001-2786 to 001-2787; Annexure AA66 para 4.2.1 *et seq* p 001-5091.

[517] AA para 343 p 001-2794.

[518] AA paras 352 to 353 p 001-2796.

[519] AA paras 352 to 353 p 001-2796.

Plan is the reason why there are, to this date, unacceptable levels of lead pollution in Kabwe. It is common cause that ZCCM failed adequately to implement the 1995 Decommissioning Plan.

534. The World Bank commissioned an Environmental Assessment ("EA") for the Copperbelt Project, which was published in February 2002. The document was prepared by Komex International Ltd and is referred to as the "Komex EA".

535. The Komex EA is a useful snapshot of the neglect by ZCCM between 1995 and 2002. It records that the lead pollution problem in and around the Mine site was not remediated and the situation in fact deteriorated through ZCCM's ill-advised commercial decisions to monetise ZCCM's assets in Kabwe.[520]

536. The Komex EA noted that this had led to misuse of the Mine site and further contamination:

> "Since ZCCM operations ceased, most of the mine complex and facilities have been sold to private investors. The mine complex facilities were sold in pieces to a total of 13 businesses and individuals. One of the larger investors, Sable Zinc, has taken over waste dumps, leach residue and tailing materials to reprocess for zinc recovery. Most others are apparently using the mine to sell scrap metal. Some new investors have misused their assets because conditions were not stipulated in the sales agreements specifying the types of allowable land use on the premises (i.e. residential or industrial. One investor has turned the former mining department offices and shift boss' offices into residential plots."[521]

[520] AA para 394 p 001-2808.

[521] AA para 402 p 001-2810.

537. The Komex EA further noted that the Kabwe Mine site was not adequately secured and there was inadequate mitigation of the severe risks, including risks of lead poisoning, created by ZCCM. Young women and children entered the site at will and children even drowned in unsecured pits on the site. Some lead metal and slag scavengers have performed secondary smelting on site.[522]

538. Perhaps most seriously, the Komex EA was concerned with the further danger posed by the dust from tailings that have not been covered with vegetation. About 50% of the tailings in Kabwe were still uncovered at the time.[523] Notwithstanding several sporadic interventions, the Mine dumps were not secured – a problem that persists to this very day.[524]

539. Also, the Kabwe Canal remained a serious source of lead contamination in Chowa. In this regard, the Komex EA noted that ZCCM positively made this situation worse by backfilling a sedimentation pond which was previously used to reduce the offsite transport of sediment. This meant that sediment now flowed directly into the canal.[525] These positive actions aggravated the danger of lead pollution to residents bordering the canal, *inter alia* because "[l]ocals have also constructed bricks from soils found near the canal, thus increasing the potential area of high lead content*."*[526]

540. The Komex EA also criticised ZCCM's remediation efforts for its wholly

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[522] AA para 403 pp 001-2810 to 001-2811; Annexure AA87 pp 001-5527 to 001-5970. See also p 001-5683, which records that "several people were killed because they were scavenging in the slag stockpile and part of the dump collapsed".

[523] AA para 404 p 001-2811.

[524] AA para 346 p 001-2795.

[525] AA para 406 pp 001-2811 to 001-2812; Annexure AA87 pp 001-5688 to 001-5689.

[526] AA para 407 p 001-2812; Annexure AA87 p 001-5689.

inadequate soil replacement programme (which had only been patchily implemented in Chowa but not at all in Kasanda). No soil was removed, and the 10 cm of new soil provided in certain areas was too thin.[527] The so-called "clean" topsoil which ZCCM had provided in Chowa "containing 200 ppm lead is still above the recommended standard of 100 ppm. Further efforts should be made to find a more suitable topsoil for gardens."[528]

541. Water Management Consultants – hired by ZCCM to scope further remediation – levelled similar criticism of the (non)-implementation of the 1995 Decommissioning Plan.[529]

542. One of ZCCM's key failures was not implementing Dr Hertzman's recommendations (discussed above).[530] Fugitive dust emissions from the tailings piles were not controlled, soil in play and domestic work areas was not adequately replaced and vegetation was not increased on open soil areas.[531]

543. Thus, in 2013, fugitive dust from the waste piles remained evident. Air lead concentrations in Kasanda were found to be remarkably similar to (and slightly higher than) the average for 1973 to 1974.[532] Only 20% of the waste dumps had been given any kind of cover at that time. In addition, this is not the kind of

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[527] The environmental services officer had warned ZCCM that such a 15 cm cover of Waelz Kiln slag would be too thin and would last only for a year: Annexure AA66 para 4.2.1 *et seq* p 001-5091.

[528] AA para 418 pp 001-2815 to 001-2816; Annexure AA87 p 001-5734.

[529] AA paras 431-444 pp 001-2821 to 0012824; Kabwe Scoping and Design Study Phase 3 Report with Site Rehabilitation and Environmental Management Plan ("SDS SREMP") March 2006 p 1. Annexure AA88 pp 001-5971 to 001-6270.

[530] AA55 pp 001-4773 to 001-4879.

[531] Komex International Report pp 159-162: AA87 pp 001-5527 to 001-5970.

[532] AA para 378 pp 001-2803 to 001-2804; Sharma second report section 7.1 p 74 with reference to Clark (1975) and AMC, 2013 at p 006-211.

"engineered cover" that is required, but only some vegetation.

544. Thus, even though ZCCM knew of the harm that would follow if it failed after closure to remediate the Mine and the surrounding area, it failed properly to do so – despite unconditionally accepting and acknowledging the obligation to do so. ZCCM had planned, but failed, to: prevent trespassing and scavenging, remove oxide ore materials and raw materials from the ISF; reprofile and vegetate the Waelz Kiln slag pile; drill and monitor boreholes to evaluate seepage from waste dumps; and remove known sources of lead along the canal (estimated to be over 20 000 tonnes of material).[533]

545. It was not only that ZCCM failed to properly decommission and rehabilitate the Mine, but that some of the actions it took exacerbated the continuing environmental disaster as a result of lead pollution. ZCCM created new dangers, including: selling off the Mine site to investors for further pollutive exploitation and limiting its own ability to rehabilitate those sites; providing contaminated soil to cover up certain areas, especially in Chowa; allowing unfettered access by the community to the Mine site; and back-filling the sedimentation pond causing pollutive discharge to flow directly to the canal.

546. One of the positive actions ZCCM took deserves separate treatment, not only because of its evident relevance to this matter – concerning community BLLs – but also because it demonstrates the callous and reckless nature of ZCCM's actions: selling off its stock of contaminated mine houses instead of demolishing

[533] Results Report 22 October 2011 p. ii.: Annexure AA90 pp 001-6274 to 001-6367.

them.

ZCCM's sale of contaminated houses

547. When it became clear that the Mine would be closed, from the early 1990s, ZCCM had to decide what it was going to do with the Mine houses it owned.

548. ZCCM owned 2042 low-cost houses built in particularly Kasanda and Chowa.[534] ZCCM was acutely aware that its housing stock was situated on lead-contaminated land and that selling the houses would pose significant health risks for its occupants in the future and a continuing liability for it. ZCCM was faced with a stark choice: either to press ahead with the sale of the housing stock and to derive whatever profit it could from the sale of these houses on lead-contaminated land – with all the foreseeable future health risks for its occupants – or to demolish the houses.

549. ZCCM chose to sell the houses, un-remediated, well-knowing the dangers they posed. When the Mine was closed in 1994, the health hazards – in the form of lead in the soil – in Kasanda and Chowa remained; and the Mine had decided to carry out a reckless plan to dispose of the houses in their contaminated state.

550. From the first meeting of the housing committee ZCCM established to decide what to do with the Mine houses, on 2 May 1990, its terms of reference included examining "the problems related to lead poisoning in the areas".[535]

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[534] The Housing Committee Minutes of 18 May 1990 at para 4.0(g) noted that the total "divisional housing stock" was 2 042 houses of which most were low-cost houses in Kasanda (1 007) and Chowa (632) (Annexure AA46 pp 001-4552 to 001-4556).

[535] AA para 255 p 001-2761; Annexure AA45 pp 001-4550 to 001-4551.

551. On 18 May 1990, the housing committee was advised as follows regarding "lead poisoning":

> "d)Nevertheless, the Company should sell the houses to outsiders only after making the township as safe as possible from residual lead in the soil arising from lead fall out over the past 30 years of operation and the inherent natural lead in the soil.
>
> e) The alternatives are either to pick up lead-containing soil and move it elsewhere or to cover the lead-containing soil.
>
> ….
>
> The meeting agreed that it may be necessary to incorporate into the contract of sale of houses a clause to indemnify the Company from any future claims that may arise from lead poisoning."[536]

552. ZCCM not only knew that much of its housing stock was lead-contaminated; but also knew that their occupants needed to be medically monitored and that, if it sold these houses to non-miners, they would not have access to the Mine's medical facilities for this purpose. ZCCM knew that it would be liable for any harm suffered by purchasers, against which liability it wished to indemnify itself.

553. The housing committee explained that, despite the anticipated reduction of contamination of the general atmosphere of Kasanda once the ISF with the non-functional emissions control was closed down:

> "the residual levels of lead already contained within the soil of this township will <u>continue to represent a significant health hazard to the residents for the foreseeable future</u>. Therefore if the houses in the townships are sold to outside organisations and individuals, it may be extremely difficult to

[536] AA para 256 p 001-2761; Annexure AA46 pp 001-4552 to 001-4556.

> monitor and check this health problem. Consequently, the Company may be left open to litigation in the unfortunate event of poisoning" (Emphases added)[537]

554. Regarding the option to remedy the environment by demolition, the report noted:

> "The existing lead in soil concentrations throughout the township represents a health risk to residents, in particular young children. The only means of totally removing this health risk is to prevent persons from living in this area through the demolition of existing houses."[538] (Emphasis added)

555. Notwithstanding the health risks, the housing committee prioritised political interests over the health of people. Its report noted that "chronic lead accumulation will be a continuing problem in Kasanda township" but nevertheless recorded that it is "accepted that the demolition of houses would be politically unacceptable".[539] This, despite knowledge that, "the law imposes on [the ZCCM] some obligation to conduct its affairs in a reasonable way so that the safety and health of the general public is not endangered".[540]

556. The houses were sold without remediation having taken place, and without the health hazards having been reduced. Thus, on 13 August 1994 a meeting was called by a representative of the Zambian government and ZCCM Kabwe Division Employees / Ex-Employees and Spouses at the Chowa Township Triangle where it was recorded that:

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[537] AA para 260 p 001-2764.

[538] AA para 262 p 001-2764; Annexure AA48 para 4.4.7 pp 001-4599 to 001-4638.

[539] AA para 264 p 001-2765; Annexure AA48 para 5.2 pp 001-4599 to 001-4638.

[540] AA para 262 p 001-2764; Annexure AA48 para 5.4 pp 001-4599 to 001-4638.

> "All employees and ex-employees would buy the houses they currently occupy, and local management to provide the details.
>
> "Advised would be home owners against selling or renting their houses to avoid homelessness and destitution."[541]

557. ZCCM received various later warnings in 1995 not to proceed to sell the houses as residential stock, because lead levels in the soil put at risk children who commonly play in the garden and soils.[542] They went unheeded, and no remediation of these houses occurred either.

ZCCM and its shareholder's lacking implementation of the Copperbelt Project

558. By 2001, the World Bank and the Zambian government launched the Copperbelt Project to address ZCCM's historical liabilities – including Kabwe, which remained a festering sore, six years later.

559. The Copperbelt Project received funding of US$50 million of which $15 million was to be spent on Kabwe.[543] It was closely coupled with the Zambian government's World Bank-sponsored privatisation drive. In tandem with the privatisation drive, the Zambian government decided that ZCCM would continue to exist only as an investment company, which would hold between 10% and 20% of the shares in its (previous but now privatised) mining interests. Accordingly, ZCCM's name was changed to ZCCM-IH.[544] Today ZCCM-IH is an

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[541] AA para 273 pp 001-2768 to 2769; Annexure AA51 para 2(a) and (b) p 001-4672.

[542] AA para 295 p 001-2778; December 1995 memorandum from Dr JH Masinja Annexure AA60 p 001-4903; AA para 293 p 001-2776; Minutes of Working Party 16 October 1995 Annexure AA59 pp 001-4895 to 001-4902.

[543] Global Greengrants Fund article 24 March 2004 p 3: Annexure AA89 pp 001-6271 to 001-6273.

[544] We repeat that, for convenience, we refer to ZCCM-IH as ZCCM although it is the same entity.

entity listed on the Lusaka and London Stock Exchanges and Euronext.[545]

560. On 22 October 2011, the World Bank published a *"*Implementation completion and results report*"* for the Copperbelt Project.[546]

561. The results report noted that, "[i]n hindsight, a number of risks were underestimated or not acknowledged. For example, the risk of insufficient commitment by the Government to improving environmental management of the mining sector and enforcing environmental regulations was rated Substantial rather than High".[547] It appears that the lack of political will was one of the biggest hindrances to the successful implementation of the project.

562. The results report lists several remediation sub-projects which were carried out in Kabwe. Many early successes were seemingly short-lived:

562.1. In respect of dredging and cleaning of the Kabwe Canal, the results report noted that "exposure to lead-contaminated soil persist due to lack of adequate maintenance by Kabwe Municipal Council". Accordingly, the "risk of flooding-induced exposure of 40 families (or 250 persons) living along the Kabwe Canal … reappeared due to the lack of adequate maintenance by the Kabwe Municipal Council".[548]

562.2. In respect or removal of mine waste material from residential areas, the report noted that 163 houses are no longer exposed to lead in their living

[545] AA para 388 p 001-2806.

[546] 2011 World Bank results report: Annexure AA90 pp 001-6274 to 001-6367.

[547] AA para 495 p 001-2844; Annexure AA90 p 001-6295.

[548] AA para 496 pp 001-2844 to 001-2845; Annexure AA90 p 001-6327; Annexure AA90 p001-6307.

environment.[549] This must be contrasted to the 2042 houses identified to be sold by ZCCM in 1994.

562.3. Overall, according to the World Bank, "the benefits generated under the Project from reduced soil contamination in Kabwe were substantial, albeit lower than anticipated".[550]

563. In assessing the risks to the development outcomes to be "substantial", the results report noted that the recontamination of remediated sites due to a lack of political will remain a risk. It observed that the interface between the Zambian government, ZCCM, the private sector and communities *"*which was supposed to facilitate the remediation of active, as well as historical, environmental liabilities remained difficult throughout the project*."*[551]

564. In a footnote, the results report highlighted that, in respect of Kabwe: "there was justifiable concern that: (i) the potentially careless exploitation of the Kabwe tailing dam would jeopardize Project efforts to control lead contamination in the area."[552]

565. It also noted that:

> "Even though the reprocessing of tailings dams and reopening of the Kabwe mine were found not to be economically viable, these sites were privatized by the Ministry of Mines and Minerals... This effectively prevented ZCCM-IH from implementing the rehabilitation and decommissioning

[549] AA para 496.2 p 001-2845; Annexure AA90 p 001-6306.

[550] AA para 496.6 p 001-2845; Annexure AA90 p 001-6308.

[551] AA para 505 pp 001-2848 to 001-2849; Annexure AA90 p 001-6313.

[552] AA para 506 p 001-2849; Annexure AA90 p 001-6313.

> works, in accordance with the Project's original scope of work. [The Environmental Council of Zambia] is expected to closely monitor the situation to safeguard Project benefits and minimize health risks for nearby communities. However, due to 'human and financial resources constraints' Project sites were not inspected and monitored by ECZ as regularly as intended (KOMEX, 2009 Component 2 Performance Review)."[553]

566. Accordingly, the benefits of the Copperbelt Project for Kabwe were ephemeral due to a combination of factors, including lack of funding for continued implementation; insufficiently thorough remediation efforts to save money; and the problems created by ZCCM's lack of ability to remediate the areas occupied by investors occupying the Mine site, coupled with a lack of oversight over their activities on the part of the Zambian government. Thus, the hurried and ill-advised "privatisation" of the Mine site and its associated waste dumps continued to haunt remediation efforts.

567. Despite the applicants' suggestion otherwise, Anglo had nothing to do with the privatisation of Kabwe Mine at all. Its efforts to assist and participate in the privatisation of ZCCM's assets solely concerned copper mining. Kabwe Mine had been closed by that time.[554]

The Zambia Mining Environment Remediation and Improvement Project ("ZMERIP")

568. Given the short-lived successes of the Copperbelt project, a second World Bank Project, the ZMERIP, was planned. By July 2016, an Environmental and Social Management Framework for the ZMERIP was published by the Zambian

[553] AA para 507 p 001-2849; Annexure AA90 p 001-6313.

[554] Anglo's FA in strike-out application paras 140 to 141 p 006-61.

Government.[555] Once again, it envisaged now well-known interventions like:

568.1. Upgrading of the existing dump site.

568.2. Improving drainage and flow of the Kabwe Canal.

568.3. Direct health interventions including blood lead level testing, treatment, and nutritional supplements.[556]

569. Clearly not much had changed in Kabwe by 2016.

570. Another US$10 million was projected to be spent on Kabwe.[557] One of the lessons learnt from the Copperbelt Project was to improve "the sustainability of investments".[558]

571. The World Bank project appraisal for the ZMERIP noted that the current environmental health issues are due to continued poor environmental governance in the mining sector.[559] Its assessment was that, "recent data from 2015 shows that the situation in Kabwe has not changed in the last five years."[560] The Zambian government maintained "a primary focus on revenue generation" and "much of the focus on mining in Zambia has been on its revenue-generating potential."[561] A failure of the Copperbelt Project was the "lack of continuity of

[555] AA para 519 p 001-2853.

[556] AA, paras 521 to 522 p 001-2854.

[557] AA para 522 p 001-2854.

[558] AA para 523 p 001-2854.

[559] AA para 530 p 001-2856.

[560] AA para 535 p 001-2858; Annexure AA103 p 001-6805.

[561] AA para 535 p 001-2858; Annexure AA103 p 6806.

interventions [which] has resulted in continued exposure to toxic pollution and cases of acute lead poisoning among children".[562]

572. The World Bank approved funding for ZMERIP in December 2016 and the closing date for the project has just passed on 30 June 2022.[563] Given the current situation in Kabwe, the ZMERIP has not proven successful yet.

Kabwe today

573. The situation in Kabwe remains dire.

574. To this day, the tailings dump surfaces remain largely uncovered, and the area is partly unfenced and accessible to the local community – a problem acknowledged by the applicants' experts.[564]

575. The applicants' experts concede that the dumps and tailings are a continuous source of contamination. Prof Betterton states that "metal contamination through wind erosion of dumps and tailings most likely continues to this day".[565]

576. Prof Taylor argues that it is inconceivable that the tailings dumps are not a continuing source of contamination to date. This is because the uncapped tailings generate fine dust/particles from wind and water erosion, and "these would adhere to clothes, hands and vehicles, promoting transfer into the

[562] AA para 535 p 001-2858; Annexure AA103 p 001-6807.

[563] AA para 538 p 001-2860.

[564] AA para 560 p 001-2869.

[565] Betterton second report para 12.58 p 001-9645.

community."[566] He further states that:

> "The available information also confirms the tailing deposits continue to be an important source of contamination, including during high rainfall, when they are washed off in to the Kabwe Canal causing additional new exposure sources in residential environments.
>
> The Kabwe Canal, which is a conduit for storm water containing hazardous material and wastes from the closed mining areas, passing through densely populated residential areas. The canal is prone to overgrowth and flooding on an annual basis, which results in an overflow of hazardous material into residential backyards.
>
> Consequently, it is inconceivable to contemplate a situation where the tailings dumps are not still supplying lead to the local community either by wind, water erosion or transfer by people deliberately (e.g. via the scavenging of mine waste) or inadvertently on clothing or hands. Individuals working on the tailings dumps will also likely suffer from lead exposure via ingestion and inhalation."[567]

577. Ultimately, Prof Taylor concludes that because the tailings waste piles remain accessible "uncovered by capping or vegetation and are being accessed by locals" these remain "an active source of dust" and will be subject to remobilisation by people, animals, rain and runoff and wind.[568]

578. Thus, ZCCM's failure to have covered the waste dumps is a present-day source of lead to the surrounding community. This must be contrasted with the efforts by the Mine, flagged above in relation to the early 1970s, to keep the mine dumps

[566] Taylor first report p 001-1747.

[567] Taylor first report 001-1749.

[568] Taylor first report 001-1764.

wet to prevent fugitive emissions. We deal with that in section 3.

579. Artisanal and small-scale miners have taken over the waste dumps, thus exacerbating lead contamination in the community. The problem of artisanal mining and scavenging began to rear its head within three years of the closure of the Mine in 1994. ZCCM Minutes dating from 1997 dealt at length with "digging of dumps by Trespassers" noting that groups of people, mainly youth, were prone to scavenging for scrap lead leaving the area prone to erosion.[569]

580. Decades later, the problem – which first emerged because of ZCCM's failure to implement the 1995 Decommissioning Plan – has exploded. Artisanal and small-scale mining has now become the main economic activity at the former Kabwe Mine in the absence of one central mining company.[570]

581. According to a report by Human Rights Watch titled "*We have to be worried – The impact of lead contamination on Children's Rights in Kabwe, Zambia*", Zambia has an estimated 87 000 artisanal and small-scale miners. The kind of artisanal mining that occurs in Kabwe – mining for lead – is rare globally, because of the severe health risks and dangers posed by it.[571] This underscores the fact that Kabwe is one of the only places in the world where a decommissioned lead mine has been unrehabilitated, leaving problems like this to grow and fester.

582. There is digging for lead on one of the old slag heaps called "Black Mountain"[572]

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[569] AA para 343 p 001-2794.

[570] AA para 552 p 001-2864.

[571] AA para 554 p 001-2867.

[572] Black Mountain is situated in the southern corner of the mine site: see the map in AA p 001-2743.

and children play there and become directly exposed to the slag dust. According to Human Rights Watch, the Kabwe Mine site poses health risks to children in two main respects:

582.1. First, children risk getting exposed to particularly high levels of lead when adult family members work at the Mine and return home with lead on their body, clothes, tools or shoes.

582.2. Second, older children also work at the Mine. Some of those would presumably include older girl children, who would be included in the second class envisaged by the applicants.[573]

583. One of the consequences of the proliferation of artisanal mining, as observed by the expert Mr Trusler, is that it has undermined attempts to remediate the dumps. Mr Trusler observed that recent reclamation activities have removed most of the vegetation which was established as part of the Copperbelt Project, including grass that had previously been growing successfully.[574]

584. The Zambian government – in response to the HRW report – acknowledges that "illegal mining operations by artisanal and small-scale miners continue to be a major challenge across the country, [but] it has become more pronounced in mining districts and former mining areas which includes Kabwe."[575] These are a direct result of ZCCM's historical decisions to relinquish control over the Mining

[573] AA para 554 p 001-2867.

[574] AA para 570 p 001-2872; Trusler report para 10.12 p 001-3447.

[575] AA para 557 p 001-2868; Human Rights Watch "We have to be worried" Appendix 1 "Zambian Government Response to Summary of Key findings from Human Rights Watch." (Annexure ZMX10 p 001-651).

site and waste dumps without ensuring their remediation or at least their inaccessibility.

585. Furthermore, the original mine plant is now extensively used by various operators. Industrial activities (notably from Sable / Jubilee) have contributed to the seepage of liquor from the Mine's tailings, residue and slag dump into a nearby dambo.[576] This occurs mainly during the rainy season. The presence of metal-rich brines leaking into the dambos surrounding and flowing through the Kabwe Mine environment and depositing metals undoubtedly contributes to current ongoing contamination.[577]

586. There is also the well-documented problem of the Kabwe Canal which continues to pose a threat of contamination.[578] The Kabwe Canal continues to receive run-off from the Jubilee processing operations and from the Mine site where there are many parties reclaiming and processing metal-enriched material.[579]

587. As if these major and increasing sources of contamination in and around the original mine plant were not bad enough, local authorities have allowed the township and informal settlements to encroach on the former site. People have been allowed to build houses and businesses on the most polluted and contaminated land, adjacent to the mine site in areas which served as a buffer between community activities and the mining and processing areas.[580]

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[576] AA para 575 p 001-2875; Trusler report para 13 p 001-3450.

[577] AA para 578 p 001-2877; Trusler report para 36 p 001-3464.

[578] AA para 579 p 001-2877.

[579] AA para 580 p 001-2877; Trusler report paras 37-38 p 001-3464.

[580] AA para 581 p 001-2879; Trusler report paras 47-54 pp 001-3467 to 001-3485.

588. Whereas in the 1970s, the boundary of Kasanda appears to be at least 1 km from the original mine plant, by 2003 this gap was eroded to about 200 m.[581] From the time-lapse photographs reproduced in the answering affidavit, there is evidence of steady encroachment of housing from the beginning of 2006, culminating with the current situation where the boundary area around the Mine is crammed into every available space along the western boundary of the Mine.[582]

589. Thus, not only are there major and increasing contemporary sources of contamination, but the town council had allowed people to build in areas which are hazardous to their health.[583]

590. The applicants' case for injury, particularly to children, arises out of dangerous conditions encountered today at and around an unrehabilitated and un-remediated mine site, which remains partially mined by other parties, but is for the rest a neglected and unprotected wasteland. The applicants have chosen to ignore and treat as irrelevant the reasons why the Mine area and its surrounds are today in a failed state. They made no attempt to determine who caused that failure and who today is liable to remedy it and who is liable for harm caused by not doing so. They ignored nearly 50 years of material events after 1974, leaving it to Anglo to investigate and present those facts. That investigation shows that Anglo did not cause the current failed state and is not liable for harm caused by the current state, nor liable to remedy it.

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[581] AA paras 581.1 to 581.2 p 001-2879.

[582] AA pp 001-2882 and 001-2884.

[583] AA para 584 p 001-2885.

591. We now turn to the legal considerations arising from these undisputed facts.

Anglo's actions and omissions are remote from the damage

592. The damage currently caused by lead emissions in Kabwe is, for multiple reasons, too remote from whatever acts or omissions Anglo is accused of, for liability to follow. The damage (suffered now) is not only remote in time from anything Anglo is accused of doing or omitting (between 48 and 98 years ago), but the way in which the damage came about was not reasonably foreseeable and entirely unexpected and unusual.[584] Moreover, events between 1974 and the present show incontrovertibly that ZCCM has broken any causal chain.

Reasonable foreseeability

593. It is clear that Anglo, purchasing some shares in a small mining concern in Northern Rhodesia in 1925, could never have foreseen that children would be born in Kabwe, almost one hundred years later, developing injuries because of lead contamination because a successor company, nationalised by a government in a different era, recklessly decided not to cover tailings dumps but to monetise them. No reasonable person could or should have foreseen, at that time, a "real risk" [585] that such a child would develop high BLLs, because her mother became an artisanal miner of lead from economic necessity on that site. The consequences of artisanal mining, or of new smelting activity on the Mine site, are exemplary of the ripples of causation stretching into eternity that that

[584] Compare *Clerk & Lindsell* (23rd Ed.) at 2-153, quoted above.

[585] See, e.g., *The Wagon Mound (No.1)* [1961] AC 388, per Viscount Simonds at 425.

doctrine of remoteness seeks to limit.

594. No reasonable person could or should have foreseen, even in 1974, that ZCCM would flout every legal and moral duty to remediate its Mine – in circumstances where all other smelter sites across the world and mentioned in the papers were successfully remediated.

595. This is a function of the lack of foreseeability of the unusual and unexpected way in which the injury came about:

595.1. It was not foreseeable that ZCCM would knowingly and intentionally neglect the Mine's maintenance, in particular the maintenance of the ISF smelter and the sinter plant – and in particular the electrostatic precipitator – giving rise to levels of lead pollution vastly exceeding that during the relevant period and which ZCCM concedes resulted in a period of the worst lead pollution in the history of the Mine.

595.2. It was not foreseeable that ZCCM's conduct after the Mine was closed would be even more egregious than when it was operating the Mine. It was also not foreseeable that ZCCM would perpetuate and compound its failures after the Mine was closed – by planning remediation, but failing to carry it out for 27 years, notwithstanding multiple reports from consultants and funding from the World Bank (in addition to the funding it should have provided itself).

595.3. It was not foreseeable that ZCCM would store uncovered Waelz Kiln slag residue, the residue of which it knew would be high in lead content, for

50 years in an exposed dump right next to Kasanda.

595.4. It was not foreseeable that ZCCM would sell off its un-remediated housing stock and the un-remediated Mine, plant and waste dumps, allowing for their continued commercial exploitation in unregulated and unsafe ways.

595.5. It was not foreseeable that ZCCM would use contaminated soil to cover certain areas in Chowa – a township only developed in the early 1970s – as part of its haphazard remediation efforts.

595.6. It was not foreseeable that ZCCM would backfill a sedimentation pond on the Mine site, thus causing lead-saturated debris to flow unhindered down the Kabwe Canal and thus be deposited in backyards in Chowa.

595.7. It was not foreseeable that ZCCM would fail to prevent scavenging and artisanal mining; fail to consistently carry out medical monitoring and provide access to medical treatment while remediation efforts stalled; and allow encroachment of the community on the un-remediated and contaminated land – all while it was aware of the harmful consequences of its ongoing failures.

595.8. It was not foreseeable that the various inconclusive remediation efforts – of which the ZMERIP is still ongoing – would serve to make any further damage even more remote.

596. Remediation of mine sites at closure is legislatively required and standard

practice around the world, including in Zambia,[586] and remediation of lead-contaminated smelter communities elsewhere in the world has been successful in reducing BLLs in surrounding communities – including in other socioeconomically deprived locations:

596.1. As Mr Sharma illustrates, BLLs in such communities tend to drop fairly rapidly and consistently – after smelter activity had been ceased or, even where it is ongoing, after significant improvements in emission control.[587]

596.2. ZCCM's then expert Dr Hertzman had advised, quite consistent with experience in smelter communities around the world, that proper decommissioning would bring down BLLs within five years (from 1995) to levels no higher than the background levels in unpolluted areas. ZCCM's failure to implement this roadmap is the reason why there are, to this date, unacceptable levels of lead pollution in Kabwe.[588]

596.3. The 2006 Site Rehabilitation Plan cited experience gained from some other smelter communities around the world (including Broken Hill in Australia). In some of them, smelting continued while actions were taken to lower BLLs. These examples showed that, where common-sense remediation actions such as soil clean-up were appropriately implemented, BLLs fell relatively rapidly and consistently - even while

[586] AA paras 326-334 pp 001-2789 to 001-2792.

[587] AA para 192 p 001-2739.

[588] AA para 290 p 001-2776.

the smelters continued to operate.[589]

597. Thus, the reasonably foreseeable course of events, even as at 1974 (let alone 1925), was that any community-based lead exposure problem would be transient and limited to the immediate surrounds of the Mine. It would be conclusively remediated, as everywhere else in the world, within a short period from closure.

598. The applicants' expert Prof Harrison noted that by 1974 it could be suspected that lead contamination in the soil could persist for 50 years or longer:

> "By 1974, there were published studies showing contamination of sites where lead had been used for many years before… While the precise magnitude of the lifetime of lead in soil was not known with the confidence level of the present time, there were at least strong grounds to suspect that the contamination would exist for 50 years and possibly longer…"[590] (Emphasis added.)

599. If that is correct, then until the very end of the relevant period Anglo could not even have suspected that lead emissions would remain in the soil until 2022; let alone that they would be caused or aggravated by a successor company over whose affairs (particularly in Kabwe) it had, by design, no say – because all private interests in the Mine were nationalised by the Government of Zambia.[591]

600. The applicants contend that the course of action followed by ZCCM was entirely foreseeable, because:

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[589] AA para 466 p 001-2834.

[590] Harrison first report para 25 p 001-2656.

[591] Holmes second affidavit paras 6 to 7 pp 001-104 to 001-106.

600.1. The measures Anglo says ZCCM should have taken are exactly those that the Mine failed to implement during the relevant period.[592]

600.2. The failure of the electrostatic precipitator and ZCCM's decision to limp along with it while it was disintegrating and then, when it collapsed, to disconnect it completely, was foreseeable because "[t]he lackadaisical attitude to maintenance and safety was already a prominent feature of the Mine's operations throughout the period of Anglo's involvement, as best demonstrated by the 1970 memorandum on the 'Broken Hill attitude'."[593]

600.3. Essentially, ZCCM's recklessness was the "continuation of a pattern of neglect that was already established under Anglo's watch".[594]

601. There is no substance in these allegations, which are patently absurd. As we show above, ZCCM had clear knowledge of the extent and nature of the harm it was doing throughout the 1980s and 1990s, while the first incidents of harm to community health which the applicants point to during the relevant period occurred in the late 1960s or early 1970s, at which time it was localised to the "bad area" of Kasanda.

602. Further, we show above that the housekeeping blemishes leading to the "Broken Hill attitude" internal memorandum in 1970 are hardly comparable to the failure and subsequent collapse of the most vital component of emissions control in the

[592] Applicants' HoA para 39.3 pp 007-22 to 007-23.

[593] Applicants' HoA para 504.2 p 007-221.

[594] Applicants' HoA para 46.5 p 007-30.

1990s; in circumstance where the Mine had spent £18 million in current value to ensure that the ISF/sinter plant were more protective of health than the equivalent plant at its home, in Avonmouth.[595]

603. It is instructive to consider the difference in approach between the Mine's reaction in the early 1970s, when the first evidence of harm to community health emerged, and that of ZCCM, in the late 1980s.

604. The applicants do not contest the evidence canvassed above regarding ZCCM's disastrous decision to sell its contaminated and un-remediated housing stock to the public – instead of demolishing them as all advice and basic common sense dictated.

605. Instead, the applicants seek to blame Anglo for the decisions taken by ZCCM by attempting to draw a false equivalence. They do so, by referring in reply to a document dated 9 July 1970[596] which, they allege, shows that the Mine manager at the time (Mr Trevor Lee-Jones) was advised by "Laine"[597] that the "whole township" area should be moved but instead, the Mine manager proposed building 488 new houses on this contaminated land.[598] The applicants then argue that "Anglo" caused the houses to be constructed; and had Anglo not constructed these houses, there would not have been contaminated housing stock for ZCCM to sell.[599]

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[595] AA para 137.3 p 001-2718.

[596] RA para 92.2 p 001-7622; Annexure ZMX107 p 001-7972.

[597] The applicants assume that this is a reference to Prof Lane.

[598] RA para 165.4 p 001-7654.

[599] RA para 165.6 to 165.7 p 001 7654.

606. The applicants' allegations are short on facts and long on conjecture.

607. The applicants missed that the decision of the Mine, as seen from the minutes of the meeting dated 13 July 1970, was "to accept that 448 houses in the bad area should be replaced and the area not used again for housing."[600] (Emphasis added) Quite simply, the applicants' allegation was 100% wrong. The Mine intended to demolish – not build – 488 houses in what was termed a "bad area".

608. A further letter from the Mine Manager dated 7 September 1970 shows that a decision had been taken to "raze A, B, C section [houses] as soon as possible". In relation to the replacement of the A, B and C section houses, the letter states that:

608.1. "A site suitable for 800 houses has been selected to the leeward of the plant. This is situated to east of, and would be considered an extension to, the 'medium density' housing area.

608.2. "It has been assessed that to provide full housing facilities for all the employees from A, B and C sections 600 dwelling units are required."

608.3. "The 600 houses [necessary to replace A, B and C sections] could thus be completed by April 1973 at the latest."[601]

609. The "medium-density housing scheme" foreshadowed in Mr Lee-Jones' letter eventually became Chowa township. Between January and June 1973, a rehousing scheme relocated 3,000 people from what the Mine at that stage

[600] Anglo's FA in strike-out application para 121.3 pp 006-51 to 006-52.

[601] Anglo's FA in strike-out application para 123 pp 006-52 to 006-55; Annexure ZMX76 p 001-1197.

identified to be the "bad area" of Kasanda, to Chowa.[602]

610. In addition to razing the "bad area" then identified – the exact action the Mine took in the early 1970s and ZCCM eschewed in the early 1990s – the Mine implemented several other drastic actions which appear entirely proportional to the harm then identified:

610.1. The flooding of dumps and the tarring of roads.

610.2. The mine dumps would be sprayed, creating water curtains to allay dust. Some residential areas would also be provided with perimeter sprays. The cultivation of vegetation will be intensified on the outermost retaining walls.

610.3. 55 200 m^2 of road would be tarred, with the objective to complete this during 1970.

610.4. Until the "bad area" could be razed, watering of roads in the area was being done on a daily basis using tractor drawn water tanks.[603]

611. Thus, the applicants' assertion that "Anglo was repeatedly party to decisions to postpone or avoid solutions to lead pollution in favour of saving money"[604] is also wrong and misleading. What the Mine had identified as "bad" was razed and its inhabitants moved. These actions, were not – as alleged by the applicants – "the

[602] Anglo's FA in strike-out application para 124 pp 006-55; AA paras 1168 and 1193 pp 001-3096 to 001-3097 and pp 001-3103 to 001-3104.

[603] Anglo's FA in strike-out application para 123 pp 006-52 to 006-55.

[604] Applicants' HoA para 504.2 p 007-222.

most minimal remediation measures".[605]

612. The applicants' suggestion that the problem may have been wider than what the Mine – at the time – had identified as the "bad area", i.e. the A, B, C section houses of Kasanda is not supported by any contemporary evidence. Regarding the Kasanda residents that remained following the rehousing, Dr Clark stated in 1975 that:

> "three thousand persons have already been rehoused in good homes in CHOWA; to rehouse the remaining 8000 Kasanda inhabitants should not be necessary provided adequate lead control measures continue to be enforced."[606]

613. Dr Clark's findings also noted that his investigations showed a very limited reach of the lead contamination of the soil, at the time:

> "of the four communities situated within a radius of approximately 3 000 metres of the Kabwe mine smelter, only two, namely Kasanda and Makululu were exposed to a high atmospheric lead environment."[607]

614. It is evident from Dr Clark's thesis that, while he had further suggestions that could be implemented by the Mine, he was also of the view that by 1975 "[m]uch has already been done to reduce lead in the effluent from the sinter and smelter furnaces" by the Mine.[608]

615. The first-hand account of Dr Clark, who forms a pillar of the applicants' case,

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[605] RA para 92.5 p 001-7624.

[606] Annexure ZMX3 pp 001-478 to 001-479.

[607] Annexure ZMX3 p 001-482.

[608] Annexure ZMX3 p 001-471.

thus emphasises the lack of a causal link between conduct during the relevant period and current circumstances.

616. The actions taken by the Mine in the early 1970s, and acknowledged by Dr Clark, were in marked contrast to the disastrous decisions of ZCCM when it was faced with a far larger problem in the late 1980s and the 1990s. ZCCM had at its disposal much more information on the extent of the problem. An internal report compiled by ZCCM in 1996 noted that:

> "ZCCM now has the knowledge and the possible solutions that have the backing of those that are world's leading experts in the field of lead poisoning and contamination. It would be difficult if not impossible to hand down the responsibility of remediation, rehabilitation and more importantly, liability to another generation. The repercussions and consequences of not remediating can only grow with time."[609] (Emphasis added.)

617. ZCCM chose to rid itself of the problem by monetising its assets, thus exacerbating the problem and allowing it to fester and spread. ZCCM is solely liable for the class members' current injuries.

ZCCM's actions and omissions constituted a novus actus interveniens

618. The applicants seek to hold Anglo liable for class members' current or future injuries, based on speculative allegations of conduct in the distant past, in the face of more recent, and directly related, ongoing tortious conduct by ZCCM. ZCCM's self-acknowledged tortious conduct has broken the chain of causation, not only because it was unforeseeable, but because it was deliberate or at least,

[609] AA para 313 p 001-2785; Annexure AA65 para 6.1.1 p 001-5081.

wholly unreasonable. It also did not consist, as the applicants would have it, solely of omissions; ZCCM had taken several deliberate decisions along the way which exacerbated the damage it had previously caused, operating the ISF without emissions controls.

619. Having set out ZCCM's conduct above, it is plain that it is the more recent and ongoing tortious conduct of ZCCM that has given rise to the "continuing environmental disaster" that the applicants refer to.[610] The subsequent actions of ZCCM, from 1974 onwards and reaching its apex in its actions and omissions connected to remediation, broke any potential causal chain to the operation of the Mine between 1925 and 1974.

620. First, ZCCM took deliberate decisions in the 1970s and 1980s to skimp on maintenance and pollution control in favour of prolonging the life of the Mine. It failed to replace crucial parts in the precipitator – eventually leading to its complete collapse – and thus knowingly allowed years' worth of uncontrolled emissions to be spewed over the surrounding communities. These actions – even on the applicants' expert's account – resulted in a significant increase in ISF/sinter plant emissions and, in ZCCM's own words, the most pollutive era in the history of the Mine.

621. Second, having knowingly taken these unreasonable actions and put the health of the surrounding community in jeopardy, ZCCM had a choice whether to sell off its housing stock on contaminated and un-remediated land or whether to demolish it, thereby stemming any further harm to the surrounding community

[610] FA para 26 p 001-24.

that might arise from people living on contaminated land.

622. ZCCM chose to profit from it and to sell off its housing stock to its retrenched workers to save cash, whilst knowing that the severely contaminated land was dangerous for children and that this would cause a health disaster for decades to come. As we show above, this was in stark contrast with the actions of the Mine a few years prior to 1974.

623. Thus, ZCCM transferred a self-created problem to third parties – in the case of purchasers of the houses - to unsuspecting and unprepared members of the community. Accordingly, ZCCM's actions were deliberate in that it appreciated the consequences of its actions but reconciled itself with the probability (and in fact the certainty) of those consequences – continued airborne dust and continued exposure of children to lead contamination.

624. Third, with considerable outside assistance, ZCCM compiled reasonable plans to remediate the self-inflicted problems but inexplicably failed to carry them out over a 27-year period – while the problem, to its knowledge, continued to grow and compound. Instead, ZCCM favoured commercial considerations, leading it in a reckless fashion to sell off both the Mine site (and waste dumps) in an un-remediated state. ZCCM was roundly criticised for this action which positively caused the present environmental disaster.

625. Fourth, ZCCM failed to secure the Mine site, allowing community members – including children and youths – to scavenge and play on the waste dumps and open pits; to engage in informal smelting activities; and thus to spread lead-suffused dust (airborne or transported) to the surrounding communities. This

reckless conduct continues to this day.

626. Fifth, ZCCM decided not cover the waste dumps appropriately, always in the vain hope that reprocessing could at some stage bring it economic benefits. ZCCM failed to ensure that the problems with the Canal were solved either conclusively (by covering the waste dumps) or in a continuing and sustainable fashion by consistent dredging and removal of the lead-contaminated materials.

627. Sixth, ZCCM took further irresponsible and unreasonable actions when it supplied contaminated soil to cover certain areas in Chowa and when it backfilled the sedimentation pond, allowing more lead-suffused debris to land up in that neighbourhood.

628. Seventh, ZCCM also decided not to continue with community blood lead monitoring and (where necessary) nutritional and medical interventions. While there were spurts of action in that regard, they invariably petered out when ZCCM lost interest or judged that they should more usefully spend their capital elsewhere.

629. ZCCM through its action and inaction positively added to the ongoing contamination of Kabwe. The above acts and omissions of ZCCM are aggravated by the following facts:

    629.1. In respect of the Mine, it was the successor in title of RBHDC through a series of name changes and amalgamations. It had been the operator of the Mine from “cradle to grave”. At all times, it retained legal liability for the operation of the Mine and its consequences.

629.2. It correctly always acknowledged this liability. It acknowledged that it was liable for such harm, including death, and was preparing itself to settle rather than to litigate such cases. Notwithstanding the total clarity of its obligations to remediate and alleviate the plight of the surrounding communities, it failed to do so.

629.3. ZCCM's liability was also legislatively confirmed. To make investment in the Zambian mining industry more attractive for private investors, this occurred through legislation which explicitly reserved all historical liabilities flowing from environmental degradation for the account of ZCCM.[611] Moreover, in 2000, the 1995 Zambian Mines and Minerals Act was amended to address the environmental liabilities associated with the assets of ZCCM. Under the amendment, which introduced section 9A into the 1995 Act, ZCCM's responsibility for environmental liabilities relating to defunct facilities (such as Kabwe) was confirmed and underlined.[612]

630. The applicants do not deny that ZCCM has acknowledged its liability.[613] ZCCM itself, and the Zambian government, have (correctly) at no stage suggested that Anglo should be held liable.[614] The obvious reason is that there is no link between the present situation in Kabwe and Anglo's involvement many years ago.

631. The actions ZCCM was expected (and had indeed planned) to take were not

[611] AA para 185 p 001-2737.

[612] AA para 334 p 001-2792.

[613] RA para 555.2 p 001-7783.

[614] AA para 609 p 001-2893.

extraordinarily complicated or difficult. It required straightforward civil engineering works and community health interventions, the likes of which were effected with success in many other places and times. It received extraordinary monetary assistance to do so, yet still failed. The cost of the interventions was also comparably modest compared to the grave dangers if the money was not spent. It was clear that the cost would skyrocket, the longer the problem should persist.

632. Thus, ZCCM's unreasonable operation of the Mine between 1974 and 1994, and its actions and omission relating to remediation, constitute fresh causes of the current damage to class members that is wholly independent from any acts or omissions that could ever be ascribed to Anglo.Against this overwhelming evidence, the applicants raise the following arguments (insofar as they have not been dealt with above):

632.1. Anglo cannot blame ZCCM for "ZCCM's failure to clean up Anglo's mess".[615] This submission flows, inter alia, from the further submission that there is a "remarkable consistency in the levels of lead contamination between 1974 and today", as measured by blood lead concentrations.[616]

632.2. "Anglo's attempt to characterise ZCCM's actions as a *novus actus*, in circumstances where Anglo remained a participant in those actions, had the means to obtain information on ZCCM's conduct, and presumably

[615] Applicants' HoA para 505.1 p 007-222.

[616] Applicants' HoA para 446 p 007-200.

reaped profits from its investments, is a remarkable stretch of this doctrine."[617]

632.3. "Anglo was instrumental in guiding the privatisation process and was one of its primary beneficiaries."[618]

633. In regard to the allegation that the "consistently high BLLs" between 1974 and today show that Anglo is responsible for current lead exposure, the argument does not follow. The Mine has been closed for nearly 30 years. The fact that BLLs remain as high as when the Mine was active, in 1974, shows that other sources of lead contamination are responsible for current BLLs.

634. Mr Sharma explains that, even before active remediation, BLLs typically decrease when smelting operations cease.[619] The fact the BLLs have remained elevated in surrounding communities suggests that alternative and fresh sources of lead – like artisanal and small-scale mining – are contributing to lead contamination as if there was an active smelter.[620]

635. BLLs in Kabwe have remained as high as when the Mine was in operation. There are, as shown by Mr Sharma, many reasons for this. One of these reasons is that there are – at present – at least eight active smelters in Kabwe including a lead and copper smelter.[621] The applicants do not deny this.

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[617] Applicants' HoA para 504.3 p 007-222.

[618] Applicants' HoA para 506 p 007-223.

[619] Sharma first report p 001-3323.

[620] Sharma first report p 001-3312.

[621] AA para 573 p 001-2873.

636. Anglo's expert, Mr Sharma, points to the fact that recent air monitoring results in Kasanda are comparable and even slightly higher than those measured by Clark in 1973. This undoubtedly points to the fact that there are continuing sources of contamination in Kabwe. Mr Sharma states that:

> "In contrast, dust monitoring in Kasanda in 1994, after the closure of the Plant, measured lead concentrations in air ranging from 51 to 290 µg/m3 (ZCCM, 1995). This range is 5- to nearly 30-fold higher than the concentrations reported by Clark (1975) when the ISF smelter was operating and is in agreement with other reports that described high dust concentrations in the late 1990s (ZCCM, Kabwe Division, 1996; AMC, 2013). Even recent measurements are still comparable (and slightly higher) than the concentrations measured in 1973-1974 (AMC, 2013). These air monitoring results demonstrate that windblown dust from the slag and tailings piles was and continues to be a material source of lead to the nearby communities because ZCCM failed to cover or revegetate these areas."

637. So, if at closure of the Mine, air lead concentrations were between 5 to nearly 30-fold higher than Clark's measurements in 1973 and recent measures are comparable if not slightly higher, it is baseless to argue that the Mine's operations nearly 50 years ago are the cause for the present-day elevated BLLs.

638. The only logical conclusion is that artisanal and small-scale mining activities, industrial activities at the former plant, encroachment, and continued contamination of the Kabwe Canal are the cause of current lead contamination.[622] These present-day problems were created and perpetuated by ZCCM, are in any event not linked in any way to Anglo, and have broken the

[622] AA para 558 p 001-2869.

causal link. On grounds of equity and policy, Anglo should not be held answerable for consequences beyond its control.

639. In regard to the suggestions that Anglo "remained a participant in [ZCCM's] actions" and that it "was instrumental in guiding the privatisation process and was one of its primary beneficiaries", they can be dealt with together. There is no evidence for these suggestions, on the papers or otherwise. If the applicants had the evidence to make out this case, they would have pleaded it in their draft POC. But it does not exist.

640. Mr Holmes has explained that, after 1974, Zambia Copper Investments ("ZCI") – an entity in which Anglo held a minority indirect interest – could appoint "B" directors to the board of ZCCM. Mr Holmes himself was such a director between 1980 and 2000. The "B" directors were by design a minority on the board and were tolerated rather than welcomed. The "B" directors were not even invited to visit the ZCCM mines or (before political changes in 1990) included in planning or budgeting discussions.

641. The "B" directors had no power or influence to change the direction of the board absent agreement of the "A" directors, appointed by the Government of Zambia. In any event, the board of ZCCM was focussed on the declining performance of its copper assets, which were unrelated and separate to Kabwe Mine and located approximately 300kms to the north, in the Zambian Copperbelt. Operational and environmental matters at Kabwe were not reported at board level.[623]

[623] Holmes second affidavit paras 6-7 pp 001-104 to 001-106.

642. Mr Holmes states under oath that the "B" directors were not briefed on adverse health related issues impacting Kabwe, and were not briefed on the closure plans for Kabwe. Accordingly, and simply due to a lack of any knowledge or involvement, at no time during that period did Mr Holmes elevate any concerns about ZCCM's activities in Kabwe to ZCI (or even less, Anglo). There was nothing to elevate, because there was nothing reported to the board.[624]

643. Mr Holmes' evidence is not meaningfully disputed by the applicants.[625] This is fatal to the applicants' suggestion that Anglo had any involvement in the reckless decisions regarding operation of the Kabwe Mine without pollution control and then selling off the land piecemeal without remediation after closure.

644. It is thus misleading and incorrect of the applicants to suggest in their heads of argument that "[a]fter 1974, the Anglo Group remained heavily involved in the Mine affairs" because "Anglo executives continued to sit on the NCCM / ZCCM Board as 'B' Directors."[626]

645. It was indeed an option for Anglo to participate in the copper assets of ZCCM upon privatisation. Anglo had nothing to do with privatisation regarding the Kabwe Mine, because it was at that time accepted by everyone that the Mine would have to close. Kabwe did not feature in the privatisation discussions.[627] Far from being a beneficiary of the privatisation of Kabwe, Anglo ultimately

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[624] Anglo's FA in strike-out application para 139 pp 006-60 to 006-61; Holmes first affidavit pp 001-7103 to 001-7105; Holmes second affidavit pp 006-103 to 006-110.

[625] Applicants' AA in Anglo's strike-out application para 95 p 006-349.

[626] Applicants' HoA para 202 p 007-97.

[627] Anglo's FA in strike-out application para 141 p 006-61.

disinvested from Zambia entirely in 2002, twenty years ago.[628]

646. Accordingly, the suggestion that Anglo had anything to do with ZCCM's disastrous and precipitous sale of sections of the Mine site, plant or waste dumps to private investors after Mine closure, is entirely baseless.

Conclusion

647. The applicants cannot show that, but for Anglo's actions or omissions, class members would not have suffered injuries. It is patently clear that factors other than guilty (or even innocent) emissions during the relevant period make an overwhelming contribution to class members' current BLLs.

648. The applicants' fall back on a "material contribution" theory of factual causation faces the difficulty of quantification of guilty lead emissions during the relevant period, with the overwhelming likelihood that emissions before and after the relevant period dwarfed any contribution that emissions during the relevant period could have made – particularly when it is considered that only proven guilty emissions during the relevant period may be taken into account for any attribution of damages to Anglo (and obviously only when all the other requisites for the tort of negligence are present). ZCCM's more recent actions in running down the ISF smelter and sinter plant alone would have dwarfed any potentially guilty emissions in the relevant period.

649. However, even if the applicants could overcome these difficulties of factual causation, they cannot overcome the remoteness of any potentially culpable

[628] AA para 956.1 p 001-3037.

actions or omissions of Anglo that occurred between 48 and 98 years ago. The applicants seek to claim for recent injuries, which are clearly caused by ZCCM's reckless operation of the ISF without emissions control. ZCCM compounded these failures with numerous other acts and omissions without which there would have been no remaining lead contamination problem in Kabwe.

650. Fairness dictates that Anglo cannot be held responsible for ZCCM's failures, over which it had no control. They were unexpected and unusual, and hence unforeseeable, especially given international experience of lead mine closures. The failures were also entirely unreasonable in their callous disregard for human life, especially given the knowledge ZCCM held at the time it made decisions to monetise its assets rather than to remediate. Its liability is acknowledged and certain, yet the applicants prefer not to pursue it.

651. Anglo's actions or omissions, which were not culpable for reasons set out above, are merely part of the background history of Kabwe. For this reason, no organisation – including ZCCM or the Zambian government – had looked to it before for compensation. ZCCM acted independently of Anglo and its board was set up in such a way as to deny its "B" directors any say in its management.

652. The reckless neglect of ZCCM is indisputable and undisputed; and it is solely liable for class members' injuries.

SECTION FIVE: INAPPROPRIATE REMEDIATION RELIEF

Introduction

653. The applicants say that they will claim damages for the remediation of the "home environment" and the "community environment".[629] But the applicants have not made out a *prima facie* case for this claim and it therefore does not raise a triable issue.[630]

654. To avoid confusion, it is important to note that the applicants do not claim for actual or physical remediation – nor could they, given that Anglo cannot effect that; and a South African court cannot force ZCCM or the Government of Zambia to effect that, given a lack of jurisdiction. Instead, they appear to seek monetary compensation *in lieu* of actual remediation.[631]

655. The proposed claim is legally unsustainable on the allegations as pleaded. Moreover, the damages flowing from the remediation claim are not determinable or ascertainable; and the applicants have proposed no basis to allocate the damages to class members. This is an additional factor why it is not in the interests of justice to certify the class action.

656. Finally, the claim for remediation relief is unsustainable on the basis that the class definitions bear no resemblance to the relief claimed. There is no evidence that the class members are entitled to the relief claimed.

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[629] FA paras 275.5 to 275.6 p 001-126; Draft POC paras 59.5 to 59.6 p 001-188.

[630] AA para 738 p 001-2935.

[631] Draft POC para 59 read with para 61 and prayers 1 and 2 pp 001-187 to 001-189.

The applicants do not show that remediation relief is legally sustainable in Zambian law

657. The draft POC attached to the founding affidavit allege that: "The members of the class have suffered estimated damages under the following heads as a result of the Defendant's conduct: …. Remediation of the home environment; Remediation of the community environment…".[632]

658. The draft POC and the affidavit of the applicants' Zambian law expert, Mr Mwenye SC, indicate that their intended claim is to be brought under the Zambian law's tort of negligence.[633] Mr Mwenye SC cites the Zambian Supreme Court case of *Michael Chilufya Sata MP v Zambia Bottlers Limited SCZ* Judgment No 1 of 2003 as authority for the proposition that there is no right of action for nominal damages in negligence.[634] Actual damage to the claimant must be proved.

659. Mr Mwenye SC considers whether the alleged physical harm to the proposed claimants' health and wellbeing is actionable,[635] but he does not deal at all with the issue of whether the alleged damage to the "home environment" and "community environment" is actionable as a negligence claim. Similarly, the applicants' English law expert, Mr Hermer KC, does not deal at all with the issue of whether "remediation damages" are recoverable under a claim for negligence.

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[632] Draft POC paras 59.5 and 59.5 pp 001-187 to 001-188.

[633] Mwenye SC report para 6.23 p 001-1708.

[634] Mwenye SC report para 6.20 p 001-1707.

[635] Mwenye SC report paras 6.32 to 6.35 p 001-1711 to 001-1712.

660. The onus lies on the party who asserts that the law of a foreign country applies to prove where it differs from our own.[636] Each aspect of foreign law is a factual question and any evidence on that aspect must emanate from someone with the necessary expertise.[637]

661. Absent any allegation by Mr Mwenye SC (or Mr Hermer KC) that damages for remediation is actionable as a common law negligence claim, the applicants have failed to show that this claim raises a triable cause of action. The claim for certification of the action insofar as it applies to the remediation relief should be dismissed on this ground alone.

662. The applicants cannot rely on legal argument based on comparative law to patch up their omission. The content of the substantive law they seek to apply is a question of fact and they have failed to acquit themselves of their onus in this regard.

663. Without prejudice to Anglo's position that the content of the Zambian law on these issues has not been proved by the applicants, there is reason to doubt that such a claim is sustainable.

664. Because the applicants have not addressed any specificity on the remediation claim in either fact or law, Anglo is prejudiced in dealing with it. Is it a negligence claim for damage to property? Is it a nuisance claim? Is it a form of special damages arising from the characteristics of the alleged personal injuries? On any of these options, however, we are not aware of Zambian precedent that

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[636] *Schapiro v Schapiro* 1904 TS 673 at 677 and 679.

[637] *Schlesinger v Commissioner for Inland Revenue* 1964 (3) SA 389 (A) at 396G.

demonstrates the triability of the remediation relief. There is also some reason to doubt whether the English law recognises an actionable claim for remediation damages in the form that it is claimed.

665. First, if the claim were pursued as damages to the class members' property, there is no indication that the class members have any title or rights in respect of any particular properties that would entitle them to claim damages for "the home environment" and "community environment". In fact, these two "environments" are left undefined.

666. The draft POC, founding affidavit and supporting affidavits are silent on the title or tenure of the properties to which the remediation claims relate. We find no allegation in the founding papers, least of all proof thereof, as to who owns the properties in relation to which remediation damages are sought.

666.1. While the applicants are described as "residing" in the Kabwe district, their title in relation to their homes is not indicated.

666.2. The founding papers are also silent on the nature of the titles relating to the undefined "community environment"; presumably some of which would be municipal or State-owned. What precisely constitutes the "community environment" is not addressed.

666.3. It follows that, on the facts before the Court, there is no basis to consider that there could be any claim for negligence by Anglo resulting in damage to any prospective class member's property, even if the draft POC were amended.

667. In the case of property, it would appear that "damage" is understood under the English common law on negligence as a "physical change which renders the article less useful or less valuable" or "a physical alteration or change, not necessarily permanent or irreparable, which impairs the value of usefulness of the thing".[638] In order to succeed in a negligence claim for damage to property, the applicants would therefore need to show (amongst others) that (1) there is a physical change to the property or properties and (2) that change impairs the value or use of the property. Both elements must be satisfied.

668. Because damage to property requires both a physical change and impairment of use, function or value, conduct by the defendant which diminishes the value of the claimant's property without altering it physically does not amount to damage. For example, in *Merlin v British Nuclear Fuels* [1990] 3 All ER 711 it was held that no liability arose where high levels of radioactivity in a house near the Sellafield reprocessing plant endangered the health of the occupants and reduced the value of the property. On the facts, there was no damage to the claimants' property, as the radioactive material had not altered the physical characteristics of the house.

669. Again, the draft POC make no allegations to sustain the elements of such a claim.

669.1. Under the heading "HARM AND CAUSATION", it is alleged that lead pollution "entered [the] environment" and "remains in the environment in the Kabwe District".[639] It is further stated that as a consequence of

[638] *Hunter v Canary Wharf Ltd* [1996] 1 All ER 482, 499 (Pill LJ) and *Ranicar v Frigmobile Pty Ltd* [1983] Tasmanian Reports (Tas R) 113, 116 (Green CJ).

[639] Draft POC paras 52.3 and 52.4 p 001-181 to 001-182.

Anglo's alleged breach of a duty of care, the class members suffered certain harm and injuries, but these are described only as physical injuries to their persons.[640]

669.2. There is no allegation that the pollutants altered the physical characteristics of any particular property or home. There is no allegation that any alteration to any property impaired its value or use.

670. Second, neither the draft POC nor Mr Mwenye SC's and Mr Hermer KC's affidavits indicate any basis for the proposed action other than as a negligence claim. For the sake of completeness, however, we address the point that the applicants have not made out a case for either "public nuisance"[641] or "private nuisance"[642] torts.

671. Even if a nuisance claim had been made, there is reason to doubt that it would be sustainable on the facts alleged. In *Jalla*, the Court of Appeal held that under a nuisance claim, while a claim for abatement of the harm could be notionally possible (i.e. to stop the source of the oil spill) Shell was not liable "on a continuing basis for their failure (or the failure of others) to remediate the damage

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[640] Draft POC paras 53 to 56.4 p 001-183 to 001-187.

[641] In *Attorney-General v P.Y.A Quarries Ltd [No1]* [1957] 2 Q.B. 169 p 170 Lord Denning held that a public nuisance is:

> "a nuisance which is so widespread in its range or so indiscriminate in its effect that it would not be reasonable to expect one person to take proceedings on his own responsibility to put a stop to it, but that it should be taken on the responsibility of the community at large."

A claim for a public nuisance can be brought by a private person if the claimant can show that he has suffered special damage. *Benjamin v Storr* (1873 - 74) L.R. 9 C.P. 400: "to entitle a private person to maintain an action for a thing which amounts to a public nuisance, he must shew that he has sustained a particular damage or injury other then and beyond the injury to the public, and that such damage is direct and substantial."

[642] A claim for private nuisance may arise in circumstances of a "continuous activity or state of affairs causing a substantial and unreasonable interference with a [claimant's] land or his use or enjoyment of that land" (*Bamford v Turnley* [1860] 3 B&S 62.)

caused by the nuisance".[643]

672. The Court of Appeal held that an individual would only acquire a claim when the oil either adversely affected their land or their rights consequential upon land, such as fishing rights.[644] The Court said that "the claim for a mandatory injunction or the costs of a remedial scheme depends on damage to land."[645] The Court of Appeal considered that the alleged spread, scale and long-term effect of the oil spill was likely different in different parts of the area in relation to which remediation had been claimed.[646] The Court held:

> "The individual characteristics of the owners may matter to the success or failure of his or her or their claim – Do they own the property in question? Has their possession of the land been adversely affected by the December 2011 oil spill? – but certainly the individual characteristics of each parcel of land will be critical. As my lord, Lord Justice Lewison, observed during argument, no-one can devise a remediation scheme (either for the respondents to implement or to pay for) without investigating the nature, scope and extent of the damage wrought by the December 2011 oil spill in the parcel of land to be remedied. So that requires a consideration of the damage in specific areas (to be agreed by the parties or decided by the judge) to see if an individual (or a group of individuals) has a claim for remediation relief whether to the extent alleged or at all."[647]

673. Third, if the remediation claim is for special damages arising from personal injury,

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[643] *Jalla & Ors v Shell International Trading And Shipping Company & Anor* [2021] EWCA Civ 63 (27 January 2021) para 77.

[644] *Jalla & Anor v Shell International Trading And Shipping Co Ltd & Anor* (Appeal (2): Representative Action) [2021] EWCA Civ 1389 (29 September 2021) para 101.

[645] *Jalla & Anor v Shell International Trading And Shipping Co Ltd & Anor* (Appeal (2): Representative Action) [2021] EWCA Civ 1389 (29 September 2021) para 102.

[646] *Jalla & Anor v Shell International Trading And Shipping Co Ltd & Anor* (Appeal (2): Representative Action) [2021] EWCA Civ 1389 (29 September 2021) para 83.

[647] Para 104.

the claim's sustainability under English law has not been shown either. Whose properties do the applicants propose they need to remediate and do they have the right to do so?

674. It is possible that the applicants envisage the "environment" to be something separate to or more than a particular property, albeit that this is nowhere anticipated in the founding papers. Even so, we have found no precedent in the English common law that would sustain an individual's claim for remediation of the "environment" (as differently conceived to "property") under the tort of negligence.

675. The applicants have therefore failed to show that the proposed claims for remediation relief have any basis in law. However, their difficulties in making out a *prima facie* case do not stop there. As we show below, their claim for remediation relief is also utterly devoid of facts sustaining the claim, such as which environments must be remedied, how it must be done, when, by whom, and how such remediation must be calculated in light of the failed previous remediation attempts and synchronised with the ongoing but halting attempts by ZCCM and the Government of Zambia.

676. While we discuss these issues below under the rubric of determinability and allocability (two of the factors a certifying court must weigh up in the interests of justice enquiry), these apply equally to show that the remediation claim is devoid of a factual basis.

The applicants have failed to show determinability and allocability

677. A class action will be certified if the relief sought, or damages claimed, flow from the cause of action and are ascertainable and capable of determination.[648] This *inter alia* requires the certifying court "to make a separate assessment at the certification stage of whether the class action procedure would be able properly to allow for the relief claimed to be determined."[649] The applicants must show how they propose to determine the relief in the class action – *inter alia*, how it is calculated or (at least) how it is calculable.[650]

678. In addition, where the claim is for damages there must an appropriate procedure for allocating the damages to the members of the class.[651]

679. In *De Bruyn*, the Court held that the applicant for certification had to show that the claim was capable of calculation and, insofar as a methodology was proposed to do so, that it was not "so methodologically flawed as to be entirely speculative".[652] The applicants further had to demonstrate that the damages so calculated are capable of being allocated to members of the class.[653]

680. The applicants' claim for remediation is impossibly vague in the following

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[648] *Trustees for the time being of Children's Resource Centre Trust v Pioneer Food (Pty) Ltd* 2013 (2) SA 213 (SCA) para 26.

[649] Unterhalter D and Coutsoudis A "*The Certification of Class Actions*" in Du Plessis M, Oxenham J, Goodman I, Kelly L and Pudifin-Jones S (eds) *Class action litigation in South Africa* Claremont: Juta (2017) p 28.

[650] *De Bruyn v Steinhoff International Holdings NV and others* 2022 (1) SA 442 (GJ) paras 280-282.

[651] *Trustees for the time being of Children's Resource Centre Trust v Pioneer Food (Pty) Ltd* 2013 (2) SA 213 (SCA) para 16.

[652] *De Bruyn v Steinhoff International Holdings NV and others* 2022 (1) SA 442 (GJ) para 281.

[653] *De Bruyn v Steinhoff International Holdings NV and others* 2022 (1) SA 442 (GJ) para 282.

respects.

681. First, the application is silent on what constitutes the “environment” generally and the “home environment” and “community environment” specifically. It is unclear whether this includes only the soil, a certain portion of the soil, the vegetation, the air, waterways, the mining site and facilities, some or all of the built structures on the various properties constituting the “environment”, just the bricks in houses, or otherwise.

682. Second, the applicants do not provide any *prima facie* plan for remediation, nor do they give any indication of how its implementation would (even theoretically) integrate with current State-sanctioned remediation. What is to be remediated (and how) is not indicated. We elaborate on this below.

683. There is also no information as to the extent or sufficiency of remediation that the applicants seek. No indication is given of whether there is a sufficiently low level of lead that the applicants are willing to tolerate in the soil, or of how long remediation is required to last to render a claim for damages calculable.

684. Such specificity – even on a *prima facie* basis – is necessary for the Court to decide whether the remediation as claimed is determinable and allocable to specific class members in the form of monetary damages.

685. Third, there are no facts pleaded specific to the proposed class representatives to indicate that they (or any number of them) would have viable claims for remediation damages.

686. In respect of the compensation claimed for injuries to their persons, the

applicants' experts have examined each of the proposed class representatives or the children that they represent. Allegations are made as to the lead content of their blood, their physical injuries, and the clinical management of those injuries that they allege will be required in the future.

687. The remediation relief is, however, not afforded similar treatment. The applicants' experts make generalisations about the lead content of the soil in the Kabwe district but do not give any assessment of the proposed class representatives' "home environment" or "community environment" and whether (and to what extent) such need remediation.

688. Prof Dargan makes vague allegations about how lead might impact a "home environment" and "community environment". But he makes no statement that the lead contamination did or does in fact cause damage to any home or particular property.

689. Without saying that he has performed an assessment of any of the proposed class representatives' homes, Prof Dargan says in general terms in apparent reference to Kabwe as a whole that: "Many houses have unpaved floors and … open soil" which has the "potential for lead contamination of dust in the home".[654] He says that: "Many houses have walls from mud bricks / burnt mud" that has the "potential that if the local soil which is heavily contaminated is used" this will produce contaminated dust in the home as the bricks deteriorate over time.[655] He alleges that: "Many roads in the residential areas in the Kabwe area are

[654] Dargan first report para 6.3 (i – iii) p 001-1796.

[655] Dargan first report para 6.3 (i – iii) p 001-1796.

unpaved, dusty roads" that have the "potential for dust to be generated from the lead contaminated soil".[656]

690. Prof Dargan refers only vaguely to the importance of remediating the "source of the lead" when managing persons with lead poisoning.[657] While he is a clinician and has no apparent expertise in environmental remediation, he describes that "large scale remediation" "can have an important effect on decreasing blood lead concentrations".[658] He says that remediation measures similar to what was implemented in Zamfara, Nigeria "in addition to remediation of residential areas would be required to reduce the impact of lead contamination".[659] He describes the remediation in Zamfara only as "large scale remediation of lead contaminated soil across a number of villages".[660]

691. We note that Anglo's expert, Mr Sharma, distinguishes the conditions in Zamfara from Kabwe. While limited community interventions and remediation programs were able to significantly decrease soil lead concentrations and exposures in Zamfara, the applicants make out no case of how this would be done in the context of Kabwe – let alone whether such measures were sustainable in Zamfara or would be sustainable in Kabwe.[661]

692. Prof Dargan further refers to an article in the Journal of Geochemical Exploration which he said provided an "overview of proposals" (which he does not detail) that

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[656] Dargan first report para 6.3 (i) p 001-1796.

[657] Dargan first report para 8.4.1 o 001-1834.

[658] Dargan first report para 8.1.4 p 001-1809.

[659] Dargan first report para 8.4.1 p 001-1835.

[660] Dargan first report para 8.1.4 p 001-1809.

[661] Sharma first report pp 001-3312 to 001-3313.

he considers "would have a significant impact on decreasing future lead exposure to residents of the Kabwe area".[662]

693. Prof Dargan makes no statement about specific remediation activities that would be required for the applicants' "home environments" or the extent to which such activities could be expected to sustainably cure or prevent future harm.

694. The applicants pivot in their heads of argument to articulating new dimensions to the remediation relief. They speak broadly of "environmental interventions" and suggest – for the first time – that actionable harm will include not only remediation of the home environment "through the removal of topsoil and other [unspecified] measures" but that this may also include entire families being "forced to leave their home and relocate elsewhere".[663]

695. Relocation costs are nowhere anticipated in the founding papers and certainly no *prima facie* case is made out in respect of any of the applicants that such damages flow from their claims. The applicants' heads only reinforce the indeterminacy of what the applicants claim with respect to remediation.

696. Fourth, the applicants give no indication that remediation damages in respect of the home and community environment are capable of being allocated to the class, bearing in mind that specific class members must be able to prove specific remediation damages – also in respect of the "community environment".

697. Ms Mbuyisa says that during the proposed second stage of the litigation, a range

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[662] Dargan first report para 8.4.1 p 001-1835. Emphasis added.

[663] Applicants' HoA para 401 p 007-182.

of damages awards would be "potentially demarcated along the lines of varying BLLs, injuries and / or different age brackets".[664] The remediation damages are not even anticipated, and the applicants have given no thought to their calculability, let alone a methodology for allocation (as required in *Children's Resources Centre)*.[665]

698. Under the heading "There is an appropriate procedure for allocating the damages to members of the class", Ms Mbuyisa uses the example of the silicosis litigation as a model for how she proposes damages will be allocated. She describes a process involving certain medical evaluations to determine the existence and severity of silicosis for each individual claimant.[666] But environmental remediation is not comparable in this way. How individual damages would be allocated in respect of the entire "community environment" is particularly perplexing in this context.

699. In the result, the Court is left to speculate precisely what the applicants propose will be remediated, how it will be remediated, the extent to which it will be remediated, or how the quantum might otherwise be ascertained on the remediation claim. The Court cannot tell whether a damages claim for remediation of the "environment" is determinable and therefore triable.

700. These deficits in the application are made worse by the common cause fact that

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[664] AA para 227 p 001-126.

[665] *Trustees for the time being of Children's Resource Centre Trust v Pioneer Food (Pty) Ltd* 2013 (2) SA 213 (SCA) para 16.

[666] AA para 279 to 283 p 001-127.

past remediation efforts over decades have failed to fix the problem.[667] The applicants simply have not shown how sustainable remediation of any particular "home environment" and least of all the entire "community environment" is to take place in a sustainable manner that both avoids the disasters created by ZCCM and the short-lived efforts of the Copperbelt Project. In this regard:

700.1. Prof Taylor says that remediation efforts over the past 20 years "clearly have had limited effect".[668]

700.2. Ms Mbuyisa implies that post-1974 remediation efforts may even have contributed to airborne lead in Kabwe.[669]

700.3. In arguing that Anglo allegedly had historical knowledge of the measures required to "address lead pollution", Ms Mbuyisa and Prof Betterton say that Anglo could have taken steps in the past to "remediate lead pollution in the Kabwe District".[670] Prof Betterton says these are measures that would have "mitigated" deficiencies in the Mine's past operations but neither he nor Ms Mbuyisa allege that these specific measures are what is required <u>today</u> to remediate the "home environment" and "community environment" or that these measures would effectively fix the problem in any sustainable sense.

701. Anglo's evidence indicates that there have been grand plans for remediation by

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[667] Applicants' HoA para 213 p 007-100, "These initiatives, implemented at great cost, have broadly failed to address the widespread lead contamination in Kabwe."

[668] Taylor first report para 7.3 p 001-1765.

[669] FA para 224.5 p 001-107.

[670] Betterton first report para 6 p 001-1638; FA para 197.12 p 001-99.

ZCCM, but that these were never completed. Where remediation efforts have been undertaken, these have been largely ineffective, and any improvements have been unsustainable. For example:

701.1. ZCCM's 1990 Housing Committee Report noted that "the only means of totally removing this health risk [of lead in the soil] is to prevent persons from living in this area through demolition of existing houses".[671]

701.2. As far back as 1992, it was accepted that resurfacing the entire Kasanda township area to a depth of one foot would not be sufficient to remediate the lead problem.[672] It would appear that ZCCM has since decided that the only way to return the soil to its residual lead levels would be to replace the topsoil completely to a level of 50 cm.[673] This has not been done.

701.3. A 1994 ZCCM Working Party Report proposed to abandon and raze the entire Kasanda township to the ground to prevent future habitation.[674] This too was not done.

701.4. In 1995 an extensive Decommissioning Plan proposed a roadmap for remediation including short-term and long-term activities with the promise that it would bring down BLLs within five years.[675] ZCCM failed

[671] AA para 262 p 001-2764.

[672] AA para 267 p 001-2766.

[673] AA para 268 p 001-2766.

[674] AA para 271 p 001-2767.

[675] AA para 289 p 001-2776.

to implement the Plan.[676]

701.5. A 1996 report suggested that the mining site could be remediated by resurfacing the entire site with Waelz Kiln slag to a depth of 15 cm but noted that this was "obviously temporary for maybe one year".[677] This particular remediation method was attempted by ZCCM at various stages, however, this did not work as predicted.[678]

701.6. The KOMEX environmental assessment demonstrated that remediation efforts such as soil replacement were ineffective due to lack of vegetation in peoples' yards, a problem exacerbated by the limits of available municipal water.[679] Together with the need to re-educate and consult extensively with stakeholders, the report implies that remediation efforts without improvements in municipal services may prove fruitless.

701.7. A review by the World Bank in 2000 of ZCCM's prior remediation actions deemed the efforts insufficient.[680]

701.8. The World Bank-funded Copperbelt Project undertook remediation measures between 2003 and 2011. The 2006 Rehabilitation Site Plan sought the "sustained protection of the Kabwe environment and its population".[681] The remediation plans included removing and disposing

[676] AA para 290 p 001-2776.

[677] AA para 316.5 p 001-2787.

[678] AA para 320 p 001-2788.

[679] AA para 414 p 001-2814.

[680] AA para 390 p 001-2897.

[681] AA para 446 p 001-2825.

of hazardous materials, demolition and re-vegetation, repair of four tailing dams and overburdened dumps, and limited soil replacement and re-vegetation in villages.[682] The goals of the plan were, however, not achieved.[683]

701.9. As was detailed in the 2006 Site Rehabilitation Plan in implementing the CEP, there was a –

> "practical constraint to site-wide rehabilitation [which] relates to the complex tenure and ownership pattern which has evolved since closure. … Consequently, ZCCM-IH does not command full jurisdiction over the site and may have limited capacity to guarantee the full implementation of any site-wide rehabilitation plan".[684]

701.10. In addition to this, the ongoing usage of certain areas of the mining site posed a challenge to the implementation of the 2006 Plan. Ongoing artisanal "scavenging" on the site undermined the sustainability of rehabilitation and remediation efforts, for example, in people unlawfully excavating material for construction purposes. There is no indication that these challenges have changed in the intervening years.

701.11. The 2006 Plan also warned that land use planning in the area needed to be carefully controlled as the most cost-effective approach to risk abatement was to avoid further occupation of contaminated land.[685]

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[682] FA para 80.5 p 001-49.

[683] AA para 469 p 001-2835.

[684] AA para 447 p 001-2825.

[685] AA para 470 p 001-2836.

Despite this, ZCCM and the Council have allowed communities to build on contaminated land in the intervening years.[686]

701.12. A 2011 World Bank Report indicates that exposure to lead-contaminated soil persists notwithstanding the dredging and cleaning of the Kabwe Main Canal because of lack of adequate maintenance by the Kabwe Municipal Council.[687] A community park had been rehabilitated and 11 community play parks constructed but these were vandalised before the end of the Copperbelt Project.[688] The rehabilitation of the water reticulation system was also undermined by the Council's failure to invest in sewerage treatment.[689]

701.13. A 2016 terre des hommes report indicated that although progress was made during the Copperbelt Project, "very little remediation work was completed [and] the risks to the community remain as high as they were prior to [the Copperbelt Project]".[690]

701.14. A Human Rights Watch Report from 2018 – 2019 says that the focus on grass planting as a home remediation measure "proved to be unsustainable once the [Copperbelt Project] ended".[691] It found that in some areas where clean topsoil was layered over contaminated soil, this

[686] AA para 471 p 001-2836.

[687] AA para 496.1 p 001-2844.

[688] AA para 496.4 p 001-2845.

[689] AA para 502 p 001-2847.

[690] AA para 517,1 pp 001-2851 to 001-2852.

[691] AA para 541 p 001-2861.

had already begun to erode, re-exposing the lead-contaminated soil.[692] Ongoing artisanal and small-scale mining in Kabwe continues to generate new sources of lead exposure to the community.[693]

701.15. The latest remediation effort – ZMERIP – is similarly being funded by the World Bank. UN Special Rapporteurs have noted that the ZMERIP plan is to clean up lead contaminated neighbourhoods and conduct testing and treatment, but it does not address the source of the contamination, i.e. the Mine's waste dumps.[694]

702. Despite the ambitious plans for remediation in the future under ZMERIP, history indicates that ZCCM has scuppered the one viable opportunity to effect sustainable remediation, when it was still in control of the Mine and the surrounding Mine townships (through the more than 2000 houses it owned[695]). There is no reason to think that awarding piecemeal compensation to select community members who have opted in to such compensation would make any difference to the ongoing environmental disaster caused by ZCCM's recklessness. That same history also indicates that, under current conditions, any remediation intervention is unlikely to be effective or sustainable, particularly with ongoing artisanal mining and poor municipal services and governance of the area.

703. To make matters worse, the applicants ask the Court to ignore the ongoing

[692] AA para 548 p 001-2863.

[693] AA paras 551 to 443 p 001-2864.

[694] AA para 588.2 p 001-2887.

[695] AA para 17 p 001-2678

remediation efforts by ZCCM and the Government of Zambia through ZMERIP.[696] The plans for that remediation project indicate complex interaction between the Zambian State, the project's global funder (the World Bank), and the affected communities.[697] It demonstrates how further remediation will require extensive consultation, not least because it risks displacement of affected communities[698] and implicates rights attendant to the various properties on which remediation will be performed. In this regard, too, the applicants' real remedy lies in obtaining actual remediation relief – not (only) monetary compensation – against the real wrongdoer (ZCCM and the Government of Zambia) in the jurisdiction where the courts may enforce such relief (Zambia).

704. Anglo explains in its answering affidavit that the ZMERIP project components include rehabilitation of waste disposal areas, such as lining the Kabwe Canal and upgrading the solid and hazardous waste disposal facility.[699] Emergency interventions have been undertaken, such as repairs to one of the tailings dams to reduce the outflow of tailings and seepage.[700] Remediation of contaminated hotspots includes remediating the Mine's Primary School and select households in Kasanda and Makululu, as well as improving environmental infrastructure.[701] Efforts are also underway to strengthen environmental governance and compliance and to undertake localised interventions involving local and national

[696] AA paras 740-740.5 p 001-2936.

[697] AA para 31 p 001-2682.

[698] AA103 para 24 p 001-6809.

[699] AA para 740.1 p 001-2936.

[700] AA para 740.2 p 001-2936.

[701] AA para 740.3 p 001-2936.

State institutions.[702]

705. How damages in respect of Anglo's alleged liability for remediation would be ascertained in the context of these existing and ongoing efforts is not dealt with, at all, by the applicants. In reply, the applicants simply say that the ZMERIP remediation efforts do not negate their claim for remediation relief.[703] The applicants argue that Anglo is blame-shifting to ZCCM[704] and that any shared liability can simply be apportioned at trial.[705] This misses the point, however, that the remediation relief must at least be shown to be ascertainable in a certification hearing, for it to be properly amenable to determination in a class action.

706. In their heads of argument, the applicants now acknowledge for the first time that "the effort to remediate the Kabwe environment will undoubtedly require the combined action of the Zambian government, ZCCM and civil society" but they argue that the complexity of the problem should not preclude the right to a remedy.[706]

707. This trivialisation of Anglo's concerns masks the depth of the problem in the applicants' case:

707.1. As remediation activities are ongoing in Kabwe, any remediation damages for which Anglo is allegedly liable is a shifting goalpost. The history of ZCCM's efforts show that remediation may in fact make

[702] AA paras 740.4 to 740.5 p 001-2937.

[703] RA paras 600.2 to 600.3 p 001-7798.

[704] RA para 24 p 001-7599.

[705] RA para 25.8 p 001-7601.

[706] Applicants' HoA para 218 p 007-102.

matters worse if not handled with great care. The applicants fail so much as to make a basic proposal of how ZCCM's and the Zambian Government's ongoing responsibility and jurisdiction over remediation efforts will be navigated concurrently to determining the claim for remediation damages against Anglo. In this, they have failed to make out a *prima facie* case that the remediation relief is ascertainable or determinable.

707.2. This is precisely the type of complexity that the applicants should have demonstrated on a *prima facie* basis, and through facts or expert evidence, is capable of resolution at trial and most appropriately resolved through the mechanism of a class action. The applicants have made no attempt to do so.

707.3. None of the relevant actors are in front of this South African court, and it thus cannot exercise oversight over them – with the result that the Court cannot afford the applicants any meaningful remediation remedy.

708. Anticipating this deficit in their case, the applicants make two arguments, both of which are meritless.

709. First, the applicants suggest that the requirement that relief is ascertainable and capable of determination is not a real concern in certification proceedings and rather reflected "the particular concerns in [Children's Resource Centre] over quantifying miniscule claims … and the proposed creation of a trust that would

not distribute damages directly to the class members".[707] The applicants claim that these requirements have no parallel in other common law countries' class action jurisprudence.[708] This is incorrect.

710. The issue of the ascertainability of the relief was not confined to *Children's Resource Centre*. It was similarly a central concern in *De Bruyn.*[709]

711. Moreover, other common law jurisdictions also grapple with these issues. That they do so under different appellations flows from the fact that those countries apply jurisdiction-specific requirements for certification. It is simply untrue that determinability issues do not concern other certification courts.

712. For example, the Canadian courts have grappled with the requirement to show a methodology to determine damages or injury under the rubric of commonality:

    712.1. In *Kirk v Executive Flight Centre Fuel Services Ltd*, the Court of Appeal for British Columbia considered the certification of a class action in a case concerning the spill of helicopter fuel in certain water sources.[710] The Court held that the plaintiff is not required to show proof of harm on a balance of probabilities at the certification stage, but he must show that a methodology exists "that is not purely theoretical but is capable of proving and measuring harm on a class-wide basis."[711] The Court

[707] Applicants' HoA para 666 p 007-286.

[708] Applicants' HoA para 666 p 007-286.

[709] *De Bruyn v Steinhoff International Holdings NV and others* 2022 (1) SA 442 (GJ) at paras 280 to 282.

[710] *Kirk v Executive Flight Centre Fuel Services Ltd* 2019 BCCA 111.

[711] *Kirk v Executive Flight Centre Fuel Services Ltd* 2019 BCCA 111 at para 103.

explained that: “A proposed methodology will not satisfy the certification requirements if it shows only how a loss can be measured, rather than how such a loss can be established on a class-wide basis”.[712] The applicants in this case have not attempted to show either how remediation damages can be measured nor how such a loss could be established on a class-wide basis.

712.2. In *Pro-Sys Consultants Ltd v Microsoft Corporation* [2013] 3 SCR 477, the Supreme Court of Canada considered an application to certify a class action by “indirect purchasers” of Microsoft products. The Court held:

“The requirement at the certification stage is not that the methodology quantify the damages in question; rather, the critical element that the methodology must establish is the ability to prove ‘common impact’…. It is not necessary at the certification stage that the methodology establish the actual loss to the class, as long as the plaintiff has demonstrated that there is a methodology capable of doing so.”[713]

712.3. The Court held further:

“This means that the methodology must offer a realistic prospect of establishing loss on a class-wide basis so that, if the overcharge is eventually established at the trial of the common issues, there is a means by which to demonstrate that it is common to the class (i.e. that passing on has occurred). The methodology cannot be purely theoretical or hypothetical, but must be grounded in the facts of the particular case in

[712] *Kirk v Executive Flight Centre Fuel Services Ltd* 2019 BCCA 111 at para 106.

[713] *Pro-Sys Consultants Ltd v Microsoft Corporation* [2013] 3 SCR 477 at para 115.

question. There must be some evidence of the availability of the data to which the methodology is to be applied."[714]

713. The applicants' second argument is to claim emphatically that Anglo does not contest that the damages flow from the pleaded cause of action.[715] This is misleading:

713.1. In support of this claim, the applicants seek to rely on a footnote to paragraph 273 of their founding affidavit which they say Anglo does not deny. Paragraph 273 states only that the draft POC show that the "claim is for compensation for lead poisoning arising from Anglo's conduct in relation to emissions of lead into surrounding areas from the Kabwe Mine."[716] This is no more than a statement of what is contained in the POC – the section makes no allegation that the relief generally or the remediation relief specifically is determinable and flows from the cause of action.

713.2. Anglo nowhere admits that the damages flow from the cause of action or that the remediation relief is determinable. Anglo argues clearly that the proposed bifurcated approach to resolution of the class action is unworkable[717] and that the remediation relief is unsustainable.[718]

714. To ask that the applicants put up even a *prima facie* case to demonstrate

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[714] *Pro-Sys Consultants Ltd v Microsoft Corporation* [2013] 3 SCR 477 at para 118.

[715] Applicants' HoA para 668 p 007-287.

[716] FA para 273 p 001-125.

[717] AA para 1297 p 001-3130.

[718] AA para 738 p 001-2935.

ascertainability and allocability of the remediation damages is central to the very purpose of certification – to avoid rendering hundreds of thousands of class members' claims *res judicata*, to avoid dragging Anglo through expensive and protracted but ultimately fruitless litigation, and to prevent the waste of scarce judicial resource on a claim that has not been shown on a *prima facie* basis to be capable of determination.

The problems with remediation relief in light of the class representatives and class definition

715. The applicants' failure to plead the essential elements of their remediation claim makes it difficult to assess whether such proposed relief is being afforded to those that would not fall under the proposed classes as defined. It also shows that the proposed class representatives are not able to represent any potential claimants for the remediation relief.

716. First, with respect to the class definitions, the draft POC describe the two classes as constituting, amongst others, children who live or "who have lived in the Kabwe District" and women of childbearing age have lived or "who reside in the Kabwe District".[719] Both classes are defined as having "suffered injury as a result of exposure to lead".[720]

717. Other than the reference to "residence" in the area, no indication is given of the commonality between these class members as it relates to the determination of the remediation damages. No mention is made of class membership including

[719] Draft POC paras 1.1.2, 1.1.3 and 1.2.2 p 001-149.

[720] Draft POC para 1.1.4 and 1.2.5, pp 001-149 to 001-150.

title or rights in respect of the properties or the "environment" in respect of which damages are claimed. No mention is made of damage to class members' properties.

718. This oversight is particularly problematic as it relates to the damages claim for remediation of the "community environment" – being a claim made not on behalf of the classes proposed to be certified, but ostensibly on behalf of the community as a whole. The English High Court's decision in *Jalla*[721] described a similar concern in that case as follows:

> "No principle of law has been identified that would enable a Claimant or community at one location in the allegedly affected area to claim remediation for damage suffered by another community at another location or for the whole area."[722]

719. Second, this lacuna in the POC extends to the applicants as proposed class representatives. They cannot represent any potential claimant for remediation damages.

720. Ms Mbuyisa says that all the applicants "have lived in the Kabwe district for their entire lives and most live in the worst affected areas – Kasanda, Makululu and Chowa".[723] The various applicants' affidavits describe where the applicants reside, but make no allegations as to their title or rights in the properties where they reside or in the "community" areas where they are alleged to be exposed to lead. As stated above, there is no indication in Prof Dargan's reports that he has

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[721] *Jalla & Ors v Royal Dutch Shell Plc & Ors* [2020] EWHC 2211 (TCC) (14 August 2020).

[722] *Jalla & Ors v Royal Dutch Shell Plc & Ors* [2020] EWHC 2211 (TCC) (14 August 2020) at para 71.

[723] FA para 237 p 001-112.

assessed any of the particular applicant's homes.

721. Mr Sharma says that there is significant variance in the state of remediation of various properties in Kabwe.[724] As a result, there is significant variability in lead concentrations in the soil in different areas.[725] Due to the piecemeal nature of past remediation efforts, any future remediation will require property-specific evaluations to define lead concentrations in surface soils at homes to determine potential lead exposure attributable to environmental sources.[726] The same variability and need for property-specific evaluations goes for the use of materials for construction from mine waste,[727] air lead concentrations,[728] and lead concentrations in drinking water.[729] It therefore cannot be assumed that generalised allegations about pollution in Kabwe apply to the proposed class representatives.

722. These flaws are fatal to the remediation claim. The class action should not be certified on this further ground. The applicants were obliged to show, in their founding papers, that this claim is legally tenable and factually supported. It has done neither. This is not an issue that can be deferred for later consideration by the trial court. There is no point in placing "a ghost in the machinery of justice".[730]

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[724] Sharma first report para 6.1.2 p 001-3294.

[725] Sharma first report para 6.1.2 p 001-3295.

[726] Sharma first report para 6.1.2 p 001-3295.

[727] Sharma first report para 6.1.3 p 001-3295.

[728] Sharma first report para 6.2.1 p 001-3300.

[729] Sharma first report p 001-3302.

[730] *De Bruyn v Steinhoff International Holdings NV and others* 2022 (1) SA 442 (GJ) para 30.

Conclusion

723. Either the applicants have included the relief as an afterthought without any substantiation, or the applicants know that the claim is unsustainable and therefore gave it as little substance as possible in order to avoid criticism. Either way, the applicants do not attempt to and indeed cannot make out a case that the remediation claim is determinable in fact and law, or that the resulting damages are allocable to specific class members.

724. The applicants have therefore laid no basis for the certification of a class action that includes the remediation relief.

SECTION SIX: A WHOLLY FOREIGN OPT-OUT CLASS IS IMPERMISSIBLE

Introduction

725. The applicants seek certification so that the determination of common issues (i.e., the first stage of their *"*bifurcated*"* procedure) will be determined on an *"*opt-out*"* basis. This means that every member of the proposed classes will be bound by this Court's determination of the common issues unless she opts out by sending written notice to the applicants' attorneys in South Africa.[731]

726. This is impermissible. By way of introduction:

726.1. It is impermissible because South African law does not, for jurisdictional reasons, permit the certification of an opt-out class made up entirely of foreign *peregrini*. Absent submission, a South African court has no jurisdiction over a foreign peregrinus plaintiff. And in a class action, merely failing to opt out does not constitute submission.

726.2. Here, the proposed classes are made up entirely of foreign *peregrini*: people who are domiciled and resident in Zambia. By asking for an opt-out class, the applicants are asking this Court to exercise jurisdiction over tens of thousands of people it has no jurisdiction over. This is impermissible.

726.3. This problem is aggravated by the fact that the notice procedure proposed by the applicants is inadequate. As a result, many class

[731] FA para 274 p 001-125 read with para 2 p 001-7.

members would not receive notice of the class action, would not understand it, and would not be able to transmit the necessary notice to opt out – and so many would be bound by the results of the class action without having genuinely consented to this.

727. The applicants are asking a lot of this Court. The opt-out classes they seek to have certified are enormous – on their estimate, between 131 000 and 142 000 of the approximately 225 000 Kabwe District residents, including between 89 000 and 99 000 children.[732] They ask this Court to exert jurisdiction over all of these people, from South Africa, without actually having jurisdiction over them, on the back of a slapdash notice procedure, and without any adult assistance to the tens of thousands of children who fall within the first class. This is impermissible and inappropriate.

728. It is Anglo's submission that this is one of the many factors that, together, mean that it is not in the interests of justice to certify at all. But if this Court is minded to certify, it should reject the applicants' request for an opt-out class and certify on an entirely opt-in basis.

This Court has no jurisdiction over the proposed classes on an opt-out basis

729. In *De Bruyn*,[733] this Division held that it is impermissible to certify an opt-out class made up of foreign *peregrini* (i.e., people neither domiciled nor resident in South Africa). There (like here), the applicant had sought to have certified an opt-out

[732] FA paras 264.1 and 264.3 p 001-123.

[733] *De Bruyn v Steinhoff International Holdings NV* 2022 (1) SA 442 (GJ).

class made up entirely of foreign *peregrini* (the *"*Foreign Shareholders Class*"*). Unterhalter J held that this was impermissible:

> *"*[W]hile certification binds *incolae*, it does not bind *peregrini* who are not, absent submission, subject to the jurisdiction of this court. This would permit *peregrini* who are members of the classes in the South African litigation to pursue litigation in multiple jurisdictions. An adverse outcome before the courts in South Africa would not be binding upon *peregrini* who would be at liberty to seek a different outcome in other jurisdictions. This is unfair, wasteful and potentially oppressive of respondents who would be required to defend the same action in multiple jurisdictions."[734]

730. Ultimately, the applicant proposed fixing the problem by converting the Foreign Shareholders Class to an opt-in class. Unterhalter J accepted this solution:

> "The principle of our law is that a plaintiff always submits to the jurisdiction in which she brings her action. It follows that if peregrini opt into the Foreign Shareholders Class, they intend to bring the class action, submit to the jurisdiction of this court and will be bound by the outcome before this court. This cures the jurisdictional complaint in respect of the Foreign Shareholders Class."[735]

731. Admittedly, Unterhalter J's holding is *obiter*. But it is, with respect, both persuasive and entirely correct and should be followed by this Court, for the reasons that follow.

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[734] *De Bruyn v Steinhoff International Holdings NV* 2022 (1) SA 442 (GJ) at para 33.

[735] *De Bruyn v Steinhoff International Holdings NV* 2022 (1) SA 442 (GJ) at para 35.

732. In ordinary litigation (i.e., non-class-action litigation), a foreign peregrine plaintiff submits to the jurisdiction of the court by bringing her action. As held in *Mediterranean Shipping*:

> "[A] plaintiff always submits to the jurisdiction of the court in which he brings his action and if he is unsuccessful in an action before a foreign court and costs are awarded against him an action can be brought in that court to enforce the judgment for costs."[736]

733. To put the point differently: Submission to jurisdiction can be express or implied. In the case of implied submission, it must be shown that the party alleged to have submitted behaved in such a manner as to give rise to a clear and irresistible inference that she submitted to the jurisdiction of the relevant court.[737] A foreign peregrine plaintiff in ordinary litigation submits to the jurisdiction of the court in this way by bringing her action – this constitutes, if not express submission, a clear and irresistible inference that she submitted to the jurisdiction of the court.

734. But one cannot apply this approach to members of an opt-out class made up of foreign *peregrini*, given that no member of an opt-out class submits to the court's jurisdiction in the same way that an ordinary foreign peregrine plaintiff does. A member of an opt-out class does not expressly submit to the jurisdiction of the court, nor does she behave in such a manner as to give rise to a clear and irresistible inference that she submitted. Indeed, she does not do anything. It is her inactivity that puts her in the class.

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[736] *Mediterranean Shipping Co v Speedwell Shipping Co Ltd* 1986 (4) SA 329 (D) at 333G to H.

[737] *Du Preez v Philip-King* 1963 (1) SA 801 (W) at 802H to 804G.

735. It follows, as correctly held by Unterhalter J in *De Bruyn*, that a South African court cannot assert jurisdiction over members of an opt-out class that are foreign *peregrini*, because they have not submitted to the court's jurisdiction, given that they take no action to be a member of the class. It is their inaction – their failure to opt out – that places them in the class.

736. As such, a South African court can only certify a class containing foreign *peregrini* if the class is opt-in.

737. The wisdom of this approach is recognised in foreign jurisdictions. For example, under section 47B(11) of the United Kingdom's Competition Act, 1998 (implemented in 2015), a class action may be brought in respect of economic injury as a result of anti-competitive conduct in the UK and —

737.1. the class may be opt-out for class members domiciled in the UK; but

737.2. the class must be opt-in for class members not domiciled in the UK.[738]

738. And in the European Union, the EU directive on representative actions for the protection of the collective interests of consumers, aimed at harmonising

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[738] This is the result of the definition of "opt-out collective proceedings" in section 47B(11), which is the following:

> "'Opt-out collective proceedings' are collective proceedings which are brought on behalf of each class member except —
>
> (a) any class member who opts out by notifying the representative, in a manner and by a time specified, that the claim should not be included in the collective proceedings; and
>
> (b) any class member who —
>
> (i) is not domiciled in the United Kingdom at a time specified, and
>
> (ii) does not, in a manner and by a time specified, opt in by notifying the representative that the claim should be included in the collective proceedings."

consumer class actions among EU member states, precludes opt-out class actions where some class members reside outside the member state in which the class action is brought. In other words, if one or more class members live outside the member state in which the class action is brought, the class must be opt-in. We quote the relevant provision in full:

> "[I]n order to ensure the sound administration of justice and to avoid irreconcilable judgments, an opt-in mechanism should be required regarding representative actions for redress measures where the consumers affected by the infringement do not habitually reside in the Member State of the court of administrative authority before which the representative action is brought. In such situations, consumers should have to explicitly express their wish to be represented in that representative action in order to be bound by the outcome of the representative action."[739]

739. It is unsurprising that many foreign jurisdictions follow the same approach as adopted by this Division in *De Bruyn* – because it is good policy (in addition to following jurisdictional first principles):

739.1. Requiring classes made up of foreign *peregrini* to be opt-in prevents fictitious consent (and the need to prevent this is acute in class actions involving foreign *peregrini*, as is explained below).

739.2. The difficulty of proper notice to foreign class members has been recognised in academic literature, and the use of an opt-out procedure

[739] European Parliament and Council Directive 2020/1828 of 25 November 2020 on representative actions for the protection of the collective interests of consumers and repealing Directive 2009/22/EC para 45.

for such class members criticised. Professor Debra Basset succinctly summarises the unfairness to foreign claimants as follows:

> "It is with respect to the failure to opt out as constituting consent that an even greater danger lies for non-U.S. absent class members. Consent to personal jurisdiction is often a legal fiction under the best of circumstances. The hapless defendant who answers a complaint without challenging personal jurisdiction has consented to such jurisdiction without knowing he has done so – a far cry from an affirmative agreement. When consent is predicated upon a claimant's failure to respond to a lengthy legal notice generated by a far-away foreign court in connection with a potentially unfamiliar type of legal proceeding, the unfairness is apparent.
>
> …
>
> In reaching across national boundaries and attempting to bind foreign claimants, U.S. courts potentially take away legal rights from foreign claimants. Under such circumstances – with claimants from another country, who may speak another language, who may be unfamiliar with the U.S. legal system, and who, depending on the country, may have had less formal schooling than most U.S. citizens – the notion of failing to respond to a lengthy legal notice as constituting consent falls."[740]

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[740] Debra Lyn Bassett, *U.S. Class Actions Go Global: Transnational Class Actions and Personal Jurisdiction*, 72 Fordham L. Rev. 41 (2003) pp 74 to 75.

See also Diane P. Wood, *Adjudicatory Jurisdiction and Class Actions*, 62 Ind. L.J. 597, 600-01 (1987) at 609-610:

> "An inference of consent to be sued from a failure to return an opt-out form is so far from the knowing, voluntary type of consent that the Court usually requires to support adjudicatory jurisdiction, and so contrary to normal assumptions about human nature in lawsuits, that an argument to the contrary is close to absurd."

739.3. In Professor Basset's view, the use of an opt-in procedure avoids these problems:

> "When an opt-in procedure is provided, consent is no longer implied or fictitious. In order to bind foreign claimants in a class action, those claimants must affirmatively elect to join the existing class litigation, which eliminates the possibility of fictitious consent. This provides superior due-process protections, and avoids the loss of individual rights under circumstances where neither minimum contacts nor genuine consent exist."[741]

739.4. In addition to avoiding fictitious consent, requiring a foreign class to be opt-in prevents foreign class members from re-litigating on similar facts in different jurisdictions (in other words, it ensures that the class action has *"*preclusive effect*"* internationally; put differently again, it prevents jurisdictional arbitrage). In an opt-out class action involving foreign *peregrini*, it is easy for those class members to argue that they are not bound by the results of the class action because they did not submit to the foreign court's jurisdiction, and so that the matter is not *res judicata* for them. It is much more difficult to do the same thing if the class action is opt-in. This benefit was recognised by Unterhalter J in *De Bruyn*,[742] and is recognised by the European Union[743] and in the United States.[744]

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[741] Debra Lyn Bassett, *U.S. Class Actions Go Global: Transnational Class Actions and Personal Jurisdiction*, 72 Fordham L. Rev. 41 (2003) p 89.

[742] *De Bruyn v Steinhoff International Holdings NV* 2022 (1) SA 442 (GJ) para 33.

[743] In the European Parliament and Council Directive 2020/1828 of 25 November 2020 on representative actions for the protection of the collective interests of consumers and repealing Directive 2009/22/EC para 45 (referred to above).

[744] See, for example, *In re Vivendi Universal, S.A. Sec. Litig.*, 242 F.R.D. 76 (S.D.N.Y. 2007); and on appeal *In re Vivendi, S.A. Sec. Litig.*, 838 F.3d 223, 264 (2d Cir. 2016).

740. The upshot for the certification application is this. The applicants' proposed classes are made up entirely of foreign *peregrini* – people domiciled and resident in Zambia. Absent submission, this Court has no jurisdiction over them. To the extent that the proposed classes are opt-out, their members would not submit to this Court's jurisdiction, and so this Court would have no jurisdiction over them. As such, the proposed classes cannot be opt-out, even at the first stage.

741. The applicants attempt to distinguish *De Bruyn* on several bases in their heads.[745] All are invalid:

741.1. The applicants' primary argument is that *De Bruyn* is distinguishable, because the foreign class members were wealthy investors who could look after themselves. There is no support for the proposition that all the investors in that case were wealthy, whether in the *De Bruyn* judgment or otherwise. In fact, the applicant in that case was a retired pensioner who bought R80,000 of shares.[746] But a litigant's wealth is plainly irrelevant to whether a court has jurisdiction over that litigant.

741.2. The applicants also claim that *De Bruyn* is distinguishable because, there, a foreign class member "could notionally have been bound by the outcome of litigation in South Africa without knowing". But that is precisely the case here, given the inadequacy of the applicants' proposed notice procedure.

741.3. Finally, the applicants argue that *De Bruyn* is distinguishable because

[745] Applicants' HoA paras 730 – 731.3 pp 007-319 – 007-320.

[746] *De Bruyn v Steinhoff International Holdings NV and others* 2022 (1) SA 442 (GJ) para 1.

some foreign class members had already sued the defendant in other jurisdictions. But while this is relevant to whether the defendant could raise the defence of *res judicata* or *lis pendens*, it is not relevant to whether the court had jurisdiction.

742. To this jurisdictional problem must be added the fact that the applicants' proposed notice procedure[747] is woefully inadequate. As such, the likely result of certification on an opt-out basis would be that tens of thousands of class members would end up bound by this Court's determination of the common issues without having heard of the class action, without having understood it, or without having had a genuine opportunity to opt out.

743. This is neither a matter of paternalism or cynicism. It is well-recognised in foreign jurisdictions that opt-out notices are inevitably complicated and unfamiliar. As Prof Basset said, in the excerpt quoted above: "When consent is predicated upon a claimant's failure to respond to a lengthy legal notice generated by a far-away foreign court in connection with a potentially unfamiliar type of legal proceeding, the unfairness is apparent."[748]

744. The applicants ask this Court to endorse publication of the class notice "using three mediums": publication in newspapers, through radio announcements, and

[747] The applicants' proposed notice procedure is set out at FA paras 319 to 329 pp 001-144 to 001-147; Moyo affidavit pp 001-2311 to 001-2320; NoM pp 001-7 to 001-13.

[748] Debra Lyn Bassett, *U.S. Class Actions Go Global: Transnational Class Actions and Personal Jurisdiction*, 72 Fordham L. Rev. 41 (2003) p 89.

through local churches.[749] We briefly deal with each in turn, and thereafter describe the serious problems common to all three forms of publication.

744.1. First, newspapers. The applicants proposed to publish the notice annexed to the notice of motion as *"*A*"*[750] in three national Zambian newspapers: *The Zambia Daily Mail*, *The Times of Zambia*, and *The Mast*, once a week for four weeks in three languages: English, Bemba, and Nyanja.[751]

744.2. But on the applicants' own version, newspaper publication would be ineffective. The applicants admit that "many Kabwe residents do not read newspapers"[752] that "[m]ost households would not buy the newspaper on a daily basis", and that "not all households are literate*"*.[753] The three newspapers are published in English, but the applicants *"*estimate that less than 50% of the population*"* can understand written English.[754] Moreover, the first proposed class is made up entirely of children, many of whom will not be able to read at all. So, the applicants are constrained to concede that newspaper publication would merely *"*complement*"* the other two forms of notice.[755]

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[749] FA para 324 p 001-144.

[750] NoM pp 001-7 to 001-10.

[751] NoM p 001-11; FA paras 325 to 325.4 p 001-145.

[752] FA para 325.4 p 001-145.

[753] Moyo affidavit para 12 p 001-2314.

[754] Moyo affidavit para 8 p 001-2313.

[755] FA para 325.4 p 001-145.

744.3. The proposed radio announcements[756] are not much better:

744.3.1. Even on the applicants' version, these messages would not come to the attention of all Kabwe residents.[757]

744.3.2. The notice merely states that class members are those *"*who have suffered injury from lead exposure*"*. Such a vague notice does not enable listeners to assess whether they fall within the class or not.

744.3.3. The notice does not explain how listeners can opt out. It merely refers them to the three newspapers (which the applicants acknowledge few people actually read), or to a website (but the applicants acknowledge many residents of Kabwe do not have access to the internet), or to the applicants' South African attorneys (who are in a different country and cannot speak any Zambian languages), or to the telephone number of one *"*Patrick Malenga (local representative)*"*, an interpreter (who would have to field calls from the between 131 000 and 142 000 class members). How the applicants expect the 99 000 class members who are children to do this is anyone's guess.

744.4. Finally, the applicants propose to pin the notice that would be published in newspapers onto the notice boards of the churches listed in Annexure

[756] NoM p 001-12. FA paras 326 to 326.5 pp 001-145 to 001-146.

[757] Moyo affidavit para 13 p 001-2315.

D to the notice of motion.[758] The primary problem with this form of notice is that the churches are only located in a small area immediately around the mine. Annexure D lists churches in the KMC townships (Kasanda, Makululu, and Chowa), Maganda (which is part of Kasanda),[759] Katondo, which is immediately east of Chowa, Waya (also called Wire,[760] which is immediately southeast of Chowa), and well as in the Kabwe city centre.[761] The applicants entirely ignore the half of the Kabwe district north of the Kabwe city centre.[762] The applicants, moreover, provide no reliable statistical information as to how many residents of Kabwe regularly attend church.[763]

744.5. The applicants have not shown that the class notices would reach even a majority of the residents of the Kabwe district to enable them to opt out.

745. We turn to additional problems common to all three forms of notice, which makes it near impossible for prospective members to take the decision to opt out.

745.1. First, the applicants have not shown that the notices would be understood – indeed, the allegations in their affidavit indicate that they would not be. The applicants acknowledge that opt-out class actions are

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[758] NoM p 001-13.

[759] FA para 295 p 001-131.

[760] See the map at p 001-560.

[761] See the maps at pp 001-560 and 001-2742.

[762] See the map at p 001-560.

[763] The best that the applicants do is the vague assurances that "Zambia is a Christian nation" and that "the majority of people in the community attend church" (Moyo affidavit para 10 p 001-2313) from Ms Lydia Moyo, a devout stationer and paralegal who lives in Chowa (Moyo affidavit paras 1 to 5 pp 001-2311 to 001-2312). She does not profess knowledge of or refer to any actual statistical information. This, with respect, is insufficient for this Court to accept that publication on church notice boards would be sufficient to reach the residents of Kabwe.

not recognised by Zambian law.[764] Neither are contingency-fee arrangements.[765] They acknowledge that "[n]o case of a remotely comparable magnitude and complexity has been tried in Zambia".[766]

745.2. The applicants therefore cannot expect that residents of Kabwe will understand what they are being asked to opt out of – at least not without legal assistance. But they also acknowledge that "[p]ractical access to legal representation is limited, as very few lawyers are located in Kabwe".[767]

745.3. Secondly, even of the residents that understand the notice, the evidence in the founding affidavit is that they will not be able to exercise their right to opt out. In order to opt out of the class in the first stage, a class member must give written notice to the applicants' South African attorneys within six weeks of when the notice of the class action is publicised.

745.4. But the applicants admit that residents of Kabwe "may not have easy access to electronic means of communication".[768] The applicants also admit that the residents of Kabwe are poor[769] and that they do not have access to lawyers.[770]

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[764] FA para 314.1 p 001-140.

[765] FA para 314.2 p 001-141.

[766] FA para 314.1(d) p 001-141.

[767] FA para 314.6 p 001-141.

[768] FA para 294 p 001-131.

[769] FA para 25.3 p 001-24.

[770] FA para 314.6 p 001-141.

746. All of the above problems are exacerbated by the fact that the first proposed class is made up of children – including thousands of babies and toddlers. Many will not be able to read any of the proposed notices, many cannot buy newspapers, many will not attend church, many will not have radio sets or cell phones to listen to the radio announcements, most will not understand the arcane, foreign legal procedure governing the class action, many will not be able to email or post the requisite opt-out notice to the applicants' South African attorneys, many will not have parents to explain the class action to them, and so on. The applicants' proposed notice procedure contains nothing to ensure that the tens of thousands of class members that are children understand what they are being expected to opt out of, or that they obtain the necessary assistance to make an informed decision.

747. The applicants appear to recognise the necessity of taking positive action to ensure the genuine participation of class members that are children – because they do so in respect of the applicants that are children. We quote from the founding affidavit:

> "The fact that the class representatives are predominantly children, represented or assisted by their parents or guardians, should not in any way be seen as an impediment to these proceedings. In terms of section 14 of the Children's Act 38 of 2005, read with section 28(2) of the Constitution and applicable international instruments, 'every child has the right to bring, and to be assisted in bringing, a matter to a court, provided that matter falls within the jurisdiction of that court'.
>
> All of the class representatives under the age of 18 are represented or assisted in bringing these proceedings by a parent or guardian. Their parents and guardians have been advised on, and accept their special

responsibilities to participate in these proceedings and to give instructions in the best interests of the class and in the best interests of the children.

Where the children are of such an age, maturity and stage of development as to be able to participate and express their views, they too have been consulted and advised fully on the nature of these proceedings, their rights, and their responsibilities."[771]

748. Having conceded that such steps are necessary for the children that are applicants, the applicants fail even to attempt to show that they will take such steps in respect of any of the tens of thousands of children in the first proposed class that are not lucky enough to be applicants.

749. In sum, not only would this Court not have jurisdiction over the members of the proposed classes on an opt-out basis; the opt-out nature of the class would result in most members of the classes being bound by the class action without their consent, given the inadequacy of the applicants' proposed notice procedures.

The applicants' counter-arguments should be rejected

750. In their heads, the applicants rely heavily on a few local and foreign cases in an attempt to argue that this Court can exercise jurisdiction over foreign *peregrini* class members on an opt-out basis – simply on the fiction that they received notice and decided to take no action. But all these cases are distinguishable.

751. The first case the applicants rely on is *Ngxuza*.[772] It is distinguishable, because:

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[771] FA paras 287 to 289 pp 001-129 to 001-130 (paragraph numbers removed).

[772] *Ngxuza v Permanent Secretary, Department of Welfare, Eastern Cape* 2001 (2) SA 609 (E); *Permanent Secretary, Department Of Welfare, Eastern Cape v Ngxuza* 2001 (4) SA 1184 (SCA)

751.1. There, all class members were *incolae* of South Africa, but some were local *peregrini* in relation to the Grahamstown High Court, where the matter was heard at first instance. *Ngxuza* is thus no authority for the proposition that a South African court can exercise jurisdiction over an opt-out class made up entirely of foreign *peregrini*.

751.2. South African law in any event treats local *peregrini* completely differently to foreign *peregrini*. A division of the High Court with subject-matter jurisdiction (for example, if the cause of action arose within the jurisdiction of that division) does not need to confirm its jurisdiction in relation to a local *peregrinus* defendant, but it does need to do so in relation to a foreign *peregrinus* defendant.[773] The concept of local *peregrini* is largely a historical anachronism.[774] Various statutes have done away with almost all the differences between *incolae* of a Division and local *peregrini*.[775] Sections 166 and section 169 of the Constitution make it clear that there is a single High Court, split into different Divisions. Foreign *peregrini*, however, are not subject to the jurisdiction of this single High Court.

751.3. Moreover, all class members in *Ngxuza* had a connection with the Eastern Cape, given that the class definition was "all people in the Eastern Cape Province who were in receipt of disability grants and who

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[773] Stephen Peté et al *Civil Procedure: A Practical Guide* 3 ed (2017) at 109 – 113 and the authorities there cited.

[774] See Andries Charl Cilliers et al *Herbstein and Van Winsen: Civil Practice of the High Courts and the Supreme Court of Appeal of South Africa* 5 ed (2009) at 103 – 104 and the authorities there cited.

[775] Section 25 of the Superior Courts Act 10 of 2013 and its predecessor, section 29 of the Supreme Court Act 59 of 1959; and section 28 of the Superior Courts Act and its predecessor, section 28 of the Supreme Court Act 59 of 1959.

had such grants cancelled or suspended between the period 1 March 1996 and the date of this judgment".[776] None of the members of the proposed classes in this case have a connection to South Africa.

752. The applicants' second case is *Nkala*,[777] where this Division certified an opt-out class that appeared to be partially made up of foreign *peregrini*. But it too is distinguishable:

752.1. In *Nkala*, the classes were only partially made up of foreigners. Moreover, all class members had a strong connection to South Africa – they had all worked on mines in South Africa for several years, as a result of which they were alleged to have contracted silicosis or tuberculosis. The evidence in that case was that they had kept these contacts through, for instance, ex-miner associations or trade union networks, through which notice would reach them. Here, the applicants have classes made up exclusively of foreign *peregrini*, all of whom have no connection to South Africa.

752.2. In *Nkala*, the class members were all adults. Here, the applicants have a proposed class made up entirely of children, and the applicants make no provision for assistance to members of the children class to ensure that they are not yoked to an opt-out class by default.

753. The applicants also rely on Canadian law,[778] which admittedly does not require

[776] *Ngxuza v Permanent Secretary, Department of Welfare, Eastern Cape* 2001 (2) SA 609 (E) at 630.

[777] *Nkala v Harmony Gold Mining Co Ltd* 2016 (5) SA 240 (GJ).

[778] Applicants' HoA paras 737 to 740 pp 007-323 to 007-325.

consent or presence to establish jurisdiction over foreign class members. But this Court is not, of course, bound by Canadian law. It is moreover telling that this Court would not have jurisdiction even under the approach in *Airia Brands*, where one of the requirements for jurisdiction over absent foreign class members was stated to be a *"*real and substantial connection between the subject matter of the action*"* and the local jurisdiction.[779] There is no such connection here. The only issue that connects this case to South Africa is that Anglo resides here. All other factual and legal issues arise in Zambia.

754. Finally, the applicants rely on *Phillips v Shutts*,[780] where the US Supreme Court approved the use of an opt-out procedure where some class members were located in a US state other than the state in which the class action is brought (the "forum state*"*).

755. But this case too does not assist the applicants. Once again, this Court is not bound by US law. *Phillips v Shutts* did not concern foreign peregrine plaintiffs – and the plaintiffs' heads are wrong to state that it did.[781] And, once again, even under the *Phillips v Shutts* approach, this Court would not be able to exert jurisdiction over members of the proposed classes. In *Phillips*, the Supreme Court held that a forum state may only exercise jurisdiction over an out-of-state class member on an opt-out basis if the class member receives "minimal procedural due process protection*"*, which would include "receiv[ing] notice plus

[779] *Airia Brands Inc. v Air Canada* 2017 ONCA 792 at para 107.

[780] *Phillips Petroleum Company v Shutts* 472 USA 797 (1985). Reliance is at applicants' HoA paras 741 to 744.2.

[781] Applicants' HoA para 741 p 007-325.

an opportunity to be heard and participate in the litigation".[782] As is explained above, given the deficiencies in the applicants' notice procedure, class members would not receive any notice of this class action at all, and would have no real ability to meaningfully participate.

756. Finally, the applicants complain that an opt-in class would be "under-inclusive".[783] But this is also an argument that falls to be rejected:

756.1. First, misses the point. This Court simply cannot exercise jurisdiction over an opt-out class made up entirely of foreign *peregrini* in these circumstances. This Court does not, with respect, reach the question of under- or over-inclusiveness.

756.2. Secondly, it gives the applicants' game away. If an opt-in class would be under-inclusive, it means that the applicants' notice procedure would be insufficient to draw people out who fall within the classes. And if this is so, it means that an opt-out class would have the effect of yoking class members to the first stage without their genuine consent – as we have explained above.

Conclusion

757. This Court is not permitted to certify the proposed classes on an opt-out basis, given that South African courts do not have jurisdiction over class members that are foreign *peregrini* who do not affirmatively join a class action on an opt-in

[782] *Phillips Petroleum Company v Shutts* 472 USA 797 (1985) at 808 to 810.

[783] Applicants' HoA paras 733 to 735 pp 007-320 to 007-322.

basis. Moreover, if this Court were to certify on an opt-out basis, the inadequacy of the applicants' proposed notice procedure would result in over a hundred thousand Zambian nationals being bound by the class action without their informed consent, including tens of thousands of children.

758. The above is one of the many factors that together mean that certification is not in the interests of justice. However, if this Court is minded to certify, it should certify the proposed classes on an opt-in basis throughout.

SECTION SEVEN: THE STRIKE-OUT APPLICATION SHOULD SUCCEED

759. Anglo has applied to strike out various parts of the replying affidavit in the main certification application.[784] By subsequent agreement between the parties,[785] only the following remains at issue:

759.1. whether the new expert affidavits of Professors Bellinger[786] and Lanphear[787] that accompany the replying affidavit in the certification application ("the first Bellinger affidavit" and "the first Lanphear affidavit"), as well as the paragraphs in the applicants' replying affidavit that refer to those two expert affidavits, should be struck out (i.e., the relief sought in prayers 1.18 and 1.19 of the strike-out notice of motion);[788] and

759.2. whether the second expert affidavits of Professors Bellinger[789] and Lanphear,[790] annexed to the applicants' answering affidavit in the strike-out application ("the second Bellinger affidavit" and "the second Lanphear affidavit") should be admitted into evidence.

760. We refer to the above material together as "the impugned evidence".

761. The parties have agreed that the following will be admitted into evidence for the

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[784] NoM in strike-out application pp 006-1 to 006-6.

[785] The agreement is described at strike-out RA paras 3 to 3.3 pp 006-591 to 006-592.

[786] Bellinger first affidavit pp 001-9340 to 001-9451.

[787] Lanphear first affidavit pp 001-9452 to 001-9514.

[788] NoM in strike-out application paras 1.18 to 1.19 p 006-4.

[789] Bellinger second affidavit pp 006-498 to 006-512.

[790] Lanphear second affidavit pp 006-579 to 006-588.

determination of the certification application (excluding the impugned evidence):

761.1. all of the evidence in the applicants' replying affidavit in the certification application;

761.2. the entirety of Anglo's founding affidavit in the strike-out application (together with all annexures and supporting affidavits), which will stand as Anglo's further answering affidavit in the certification application; and

761.3. the entirety of the applicants' answering affidavit in the strike-out application (together with all annexures and supporting affidavits), which will stand as the applicants' further replying affidavit in the certification application.

762. Anglo maintains that the impugned evidence falls to be struck out (or not admitted). By way of summary:

762.1. In motion proceedings, an applicant must make all essential averments in its founding affidavit. A court will generally not allow an applicant to make or supplement its case in reply. While a court has a discretion to permit a departure from this rule, it will only be exercised in exceptional circumstances.[791]

762.2. The impugned evidence falls to be struck out for just this reason. It constitutes new evidence by new experts impermissibly sought to be introduced in reply. No exceptional circumstances exist justifying a

[791] *Shephard v Tuckers Land and Development Corporation (Pty) Ltd* (1) 1978 (1) SA 173 (W) at 177G – 178A, recently cited with approval in *Mostert v FirstRand Bank Ltd* 2018 (4) SA 443 (SCA) para 13.

departure from the default exclusionary rule.

The impugned evidence constitutes impermissible new evidence in reply

763. In the draft POC, the applicants plead that harm includes:

763.1. the acquisition or risk of acquisition of a vast range of maladies allegedly caused by lead exposure;[792] and

763.2. a BLL that is merely *"*elevated to an extent that requires medical monitoring and intervention*"*.[793]

764. In the founding papers, the applicants' case was that the threshold BLL that requires medical monitoring and intervention (and thus the minimum BLL that constitutes harm) was 5 µg/dL:

764.1. This follows from the expert report of Professor Dargan, where he asserts that medical monitoring is only necessary for those with BLLs of 5 µg/dL and above.[794] The applicants repeat this assertion several times in the founding affidavit.[795]

764.2. It further follows from the brief given by the applicants to Professor Thompson. She was briefed to estimate the size of the proposed classes, and her brief was restricted to those with BLLs of above

[792] Draft POC paras 54 to 55.5 pp 001-184 to 001-186.

[793] Draft POC para 56.1 p 001-186.

[794] Dargan first affidavit para 8.4.4 p 001-1837.

[795] FA para 230 p 001-109; paras 232 to 234 p 001-110.

5 µg/dL.[796]

765. Anglo was therefore called upon to meet a case that those with a BLL over 5 µg/dL may have suffered an injury for purposes of the class definition.

766. But with the impugned evidence, introduced for the first time in reply, the applicants attempt to put up an entirely new case: that even a BLL of less than 5 µg/dL constitutes harm. The first Bellinger affidavit contains the following evidence:

766.1. A summary of literature that purportedly shows that low BLLs, including BLLs of less than 5 µg/dL, are associated with various adverse and irreversible effects in children.[797]

766.2. An argument that these adverse effects are more pronounced in disadvantaged children.[798]

766.3. Evidence for what Professor Bellinger calls the *"*supra-linear dose-response relationship*"* for lead, which is the proposition that a 1 µg/dL increase in BLL has a greater adverse effect at a lower BLL (i.e., a BLL of less than 10 µg/dL) than a higher one.[799]

766.4. That a person who grew up close to the Mine in Kabwe that currently has a relatively low BLL likely had a *"*considerably higher blood lead

[796] FA paras 264 to 264.4 pp 001-122 to 001-123. See also Thompson report paras 3 – 4(d) pp 001-1662 to 001-1663.

[797] Bellinger first affidavit paras 9 to 16 pp 001-9344 to 001-9345.

[798] Bellinger first affidavit paras 17 to 20 pp 001-9350 to 9352.

[799] Bellinger first affidavit paras 21 to 22 pp 001-9352 to 001-9353.

concentration in early childhood" and that any maladies the person now suffers from, that could have been caused by lead, likely were caused by lead exposure in childhood.[800]

767. The second Bellinger affidavit supplements the views raised in the first affidavit against contrary views raised by Anglo's experts. Professor Bellinger:

767.1. supplements his justification of the supra-linear response curve;[801] and

767.2. supplements his view that even low BLLs are associated with adverse effects.[802]

768. Professor Lanphear's evidence is to the same effect. In his first affidavit, he:

768.1. summarises evidence that purportedly shows that even BLLs below 5 µg/dL cause harm;[803]

768.2. argues that this is supported by standards and guidance of the WHO and the US CDC;[804] and

768.3. claims that lead can be attributed as "a contributing risk factor" for maladies suffered by an individual child.[805]

[800] Bellinger first affidavit paras 26 to 28 pp 001-9355 to 001-9356.

[801] Bellinger second affidavit paras 8 to 8.1 pp 006-501 to 006-502.

[802] Bellinger second affidavit paras 9 to12.1 pp 006-502 to 006-509.

[803] Lanphear first affidavit paras 8 to 16 pp 001-9455 to 001-9460.

[804] Lanphear first affidavit paras 17 to 18 pp 001-9460 to 001-9461.

[805] Lanphear first affidavit paras 19 to 21 pp 001-9461 to 001-9462.

769. In Professor Lanphear's second affidavit, he:

769.1. supplements Professor Bellinger's evidence on the supra-linear response curve;[806] and

769.2. supplements the applicants' case on the link between BLLs, even very low ones, and harm.[807]

770. In short, this is an entirely new case to the one raised in the founding papers (and to which Anglo's experts responded), which is that a BLL of 5 µg/dL or above constitutes harm.

771. Not only is the impugned evidence a new case – it is evidence by entirely new experts. Inviting Anglo to respond to this new evidence is no answer to impermissibly introducing this new evidence. It perpetuates a proliferation of expert reports on issues that the applicants ought to have established, but did not, in their founding papers.

772. It is worth emphasising how wide-ranging the impugned evidence is. Between them, Professors Bellinger and Lanphear refer in their bibliographies to 73 reports and academic papers not referred to by Professor Dargan (the expert commissioned by the applicants to deal with the health effects of lead in the founding papers) in his first expert report. To respond adequately to all of this new material, Anglo would have to find experts who are qualified to analyse and respond to it, and then give them time to draft the necessary expert reports. Such

[806] Lanphear second affidavit para 6.1 pp 006-581 to 006-582; para 6.3 p 006-582.

[807] Lanphear second affidavit para 6.2 p 006-582; paras 6.4 to 6.6 pp 006-583 to 006-584.

a breadth of new material is, in any event, not something Anglo could meaningfully respond to within the time periods imposed for the progression of the matter.

773. The applicants argue that the impugned evidence is not impermissibly introduced in reply because it *"*elaborated on the allegations made in the founding papers*"*.[808]

774. In the first instance, this is incorrect. If the applicants' case was in any sense that a BLL of below 5 µg/dL constitutes harm, they would not have briefed Professor Thompson only to estimate the size of the classes with reference only to BLLs of 5 µg/dL or more; and Prof Dargan would have provided recommendations in his report on the required clinical monitoring and intervention of individuals with any non-zero BLLs.

775. But even if it were assumed for the sake of argument that the impugned evidence in some sense *"*elaborate[s]" on the case in the founding papers, this would still not be permitted. It is not only impermissible to make out an entirely new case in reply. It is also impermissible to supplement in reply a case one did make out in the founding affidavit. As stated in *Titty's Bar*:

> "It lies, of course, in the discretion of the Court in each particular case to decide whether the applicant's founding affidavit contains sufficient allegations for the establishment of his case. Courts do not normally

[808] AA in strike-out application paras 152 to 152.3 p 006-377.

countenance a mere skeleton of a case in the founding affidavit, which skeleton is then sought to be covered in flesh in the replying affidavit."[809]

776. Similarly, in *Bayat v Hansa* the following was held:

> "[A]n applicant for relief must (save in exceptional circumstances) make his case and produce all the evidence he desires to use in support of it, in his affidavits filed with the notice of motion, whether he is moving *ex parte* or on notice to the respondent, and is not permitted to supplement it in his replying affidavits (the purpose of which is to reply to averments made by the respondent in his answering affidavits), still less make a new case in his replying affidavits."[810]

777. The applicants also argue that the impugned evidence is not impermissible new matter because it "consisted of rebuttal of Anglo's expert evidence".[811] But this is not a fair representation of the impugned evidence:

777.1. Most of the first set of impugned affidavits do not refer to Anglo's experts at all. Professors Bellinger and Lanphear's briefs make it very clear that their primary role is to make the applicants' case on the alleged harms of miniscule amounts of lead, and not to respond to Anglo's experts. Professor Bellinger describes his brief as follows:

> "8. I have been asked by Mbuyisa Moleele and Leigh Day to:
>
> 8.1. review the weight and strength of prevailing evidence in respect of the effects of lead on children at blood lead levels less than 10 µg/dl, with a particular focus on

[809] *Titty's Bar and Bottle Store (Pty) Ltd v ABC Garage (Pty) Ltd* 1974 (4) SA 362 (T) at 369A – B.

[810] *Bayat v Hansa* 1955 (3) SA 547 (N) at 553C – E.

[811] AA in strike-out application paras 154 and 156 p 006-378.

neurodevelopment, including cognitive and behavioural effects;

8.2. provide my opinion on the extent to which any lead-induced impairment that occurs at blood lead levels of 10 µg/dl or below is generally greater at higher blood lead levels;

8.3. consider whether and how population data may be used in the assessment of individuals for lead-induced harm;

8.4. provide my opinion on whether, on the balance of probabilities, all children whose blood lead levels are less than 10 µg/dl are likely to suffer from lead-induced injury;

8.5. provide my opinion on the clinical significance of a high childhood blood lead concentration in the assessment of both historic and present lead-induced injury in older children whose current blood lead concentration is low; and

8.6. respond to specific points raised in the reports of Drs Beck and Banner on this subject."[812]

777.2. Five out of the six points Professor Bellinger is briefed to consider have nothing to do with Anglo's experts. They are all topics related to the harmfulness of lead that should have been raised in the founding affidavit. And the sixth point is ancillary – to supplement the other five in the light of Anglo's evidence.

[812] Bellinger first affidavit paras 8 to 8.6 p 001-9344.

777.3. Professor Lanphear's brief does not even refer to the applicants' experts:

> "7. I have been asked by Mbuyisa Moleele and Leigh Day to:
>
> 7.1. review the weight and strength of prevailing evidence in respect of the effects of lead on children at blood lead levels less than 10 µg/dl and less than 45 µg/dl.
>
> 7.2. consider whether the standards and guidance given by the US CDC and WHO are justified and appropriate; and
>
> 7.3. provide my opinion on whether, on the balance of probabilities, lead induced injury can be proved in an individual whose blood lead levels are less than 10 µg/dl and less than 45 µg/dl."[813]

777.4. Again, these are all variations on the theme that lead is harmful even at very low concentrations, evidence for which should have been fully set out in the founding affidavit.

777.5. Admittedly, the second set of impugned affidavits refer to Anglo's experts, but the purpose is to defend the evidence (impermissibly) raised in the first set of affidavits. If the first set of affidavits must go, so must the second.

778. Assessed fairly and in the round, what the applicants are attempting to do with the impugned evidence is to make a new case in reply that is different to the one they made in the founding affidavit. They should not acquire a second chance to make their case merely by peppering the impugned evidence with a few

[813] Lanphear first affidavit paras 7 to 7.3 p 001-9455.

references to Anglo's experts, and then pretending that the impugned evidence is merely a response to Anglo's case.

There are no exceptional circumstances that justify admission

779. Given that the impugned evidence constitutes an impermissible attempt by the applicants to make a new case in reply, it falls to be struck out (or not admitted, in the case of the second set of affidavits) – unless exceptional circumstances exist that justify their admission. There are none:

779.1. A crucial factor relevant to whether exceptional circumstances exist is the explanation for why the new evidence was not introduced timeously in the founding papers.[814] The applicants do not bother themselves to provide one.[815] Without such an explanation, they cannot expect this Court to exercise its discretion in their favour.

779.2. While prejudice is not a requirement for the grant of a striking-out application of evidence impermissibly included in reply,[816] we point out that the inclusion of the impugned evidence would prejudice Anglo. In effect, Anglo is called to meet a new case. At the very least, the introduction of this new evidence creates uncertainty as to precisely what the applicants' case is.

779.3. The applicants argue that there is no prejudice because Anglo can

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[814] *Mostert v FirstRand Bank Ltd* 2018 (4) SA 443 (SCA) at para 13.

[815] The applicants' pleaded case for the inclusion of the impugned evidence is at strike-out AA paras 150 to 158 pp 006-376 to 006-378.

[816] *Parents' Committee of Namibia v Nujoma* 1990 (1) SA 873 (SWA) at 876C – E.

respond to the impugned evidence at the trial.[817] This misses the point – the trial itself is the prejudice. The applicants blithely assume that a trial will occur, but Anglo has a legitimate interest in holding in the applicants to a fair and lawful procedure so that certification is not granted, and a trial does not occur at all.

Conclusion

780. Through the affidavits of Professors Bellinger and Lanphear, the applicants seek impermissibly to make out a new case in reply. The first set of impugned affidavits fall to be struck out, and the second set fall not to be admitted.

[817] AA in strike-out application para 158 p 006-378.

SECTION EIGHT: THE APPLICANTS' CLASS DEFINITION IS OVERBROAD

781. The applicants' proposed class definition is overbroad in three respects:

781.1. First, it is geographically overbroad, in that both proposed classes would include people residing anywhere in the Kabwe district, when, at best, the applicants' case justifies only including people residing in the so-called "KMC townships" that are directly around the Mine – namely Kasanda, Makululu and Chowa.

781.2. Second, it is overbroad, in that it includes people who have not suffered any injury as a result of exposure to lead.

781.3. Third, the second proposed class (women of child-bearing age) would include people whose claims have become time-barred.

782. Anglo's case remains that certification should be refused in its entirety. However, if this Court is minded to certify a class or classes, it should narrow the proposed class definition to include only those that reside in the KMC townships, only those who have suffered an injury as a result of exposure to lead and only those in the second proposed class whose claims have not become time-barred.

The class definition is geographically overbroad

783. For the applicants to be entitled to a class definition covering the entirety of the Kabwe District (an area of almost 1 570 km^2 – the size of the City of Johannesburg)[818] they must show that it is in the interests of justice for a such a

[818] AA para 747 p 001-2939. Not specifically denied at RA para 602 pp 001-7798 to 001-7799.

large class to be certified, with reference to the factors in *Children's Resource Centre*.[819]

784. And in *Children's Resource Centre*, Wallis JA warned that the broader a proposed class definition, the less likely it will be that the factors relevant to the interests of justice will be present.[820] For example, an applicant punting an over-inclusive class will find it difficult to show a triable issue in respect of the whole class and the more likely it will be that the class action will become oppressive to the respondent: *"*where the mere threat of lengthy and costly litigation may be used to induce a settlement even though the case lacks merit*"*.[821]

785. The proposed classes, because they are geographically over-inclusive, suffer from just these problems. It is not in the interests of justice to certify a district-wide class.

<u>The applicants do not show a triable issue in respect of the entirety of the district</u>

786. In the founding papers, the applicants' case on causation was that the Mine only caused lead pollution in a small area immediately around the Mine: specifically Kasanda (which is immediately northwest of the Mine), Makululu (immediately northwest of Kasanda), and Chowa (immediately southeast of the Mine). This appears most clearly from paragraph 76 of the founding affidavit:

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[819] *Trustees for the time being of Children's Resource Centre Trust v Pioneer Food (Pty) Ltd* 2013 (2) SA 213 (SCA).

[820] *Trustees for the time being of Children's Resource Centre Trust v Pioneer Food (Pty) Ltd* 2013 (2) SA 213 (SCA) at para 30.

[821] *Trustees for the time being of Children's Resource Centre Trust v Pioneer Food (Pty) Ltd* 2013 (2) SA 213 (SCA) at para 24.

> "[W]ind patterns in Kabwe are dominated by winds from an eastern/south-eastern direction which, as Prof Betterton points out, aligns with global scale trade wind patterns known since the eighteenth century. Throughout the Mine's operations, these winds carried lead fames and dust from smelting and mining operations directly over Kasanda and Makululu, with occasional shifts in wind direction, particularly in summer, also carrying emissions to nearby Chowa. Due to the proximity of the townships of Kasanda, Makululu and Chowa to the Mine site, this airborne lead and windblown dust would have been deposited in the local environment continuously."[822] (Emphases added)

787. The studies on lead pollution referred to in the founding affidavit were all almost entirely focused on the KMC townships (quotations are from the founding affidavit):

787.1. The 1975 study by A.R.L. Clark of the London School of Hygiene and Tropical Medicine was of Kasanda, Makululu and Chowa.[823]

787.2. The 2001/2002 study by the World Bank *"*found that environmental lead pollution was greatest in Kasanda and Chowa*"*.[824]

787.3. The 2019 study by Bohdan Kříbek *"*produced contour maps illustrating a range of high topsoil concentrations … across areas covering Kasanda, Chowa and Makululu*"*.[825]

787.4. The 2015 study led by Dr John Yabe "analysed the BLLs of 246 children

[822] FA para 76 p 001-46.

[823] FA para 80.1 p 001-48.

[824] FA para 80.3 p 001-48.

[825] FA para 80.4 p 001-49.

under the age of 7 from Kasanda, Makululu and Chowa" and found high BLLs.[826]

787.5. Dr Yabe's subsequent 2020 study found that "[a]reas where residents were most affected were Kasanda, and Makululu, … followed by Chowa".[827]

788. In the founding papers, all of the applicants' experts that considered the geography of lead pollution focused on the KMC townships:

788.1. Professor Betterton was briefed to "prepare a report dealing with mining practices and lead emissions from the Kabwe mine … during the period 1925 – 1964/1974".[828] His report focuses on the KMC townships:

788.1.1. He considers "[t]he key routes by which lead from the mine has been transferred to the Kabwe community, in particular the villages of Kasanda, Makululu and Chowa".[829]

788.1.2. He considers "whether the company should have foreseen the risk of lead poisoning to members of the Kabwe community, in particular residents of Kasanda, Makululu and Chowa".[830]

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[826] FA para 80.7 p 001-50.

[827] FA para 80.8 p 001-50.

[828] Betterton report p 001-1616.

[829] Betterton report section 2 p 001-1618.

[830] Betterton report section 4 p 001-1623.

788.1.3. He concludes that "it was not safe for the residents of Kasanda or Makululu, which are 'downwind' of the smelter, or even for the residents of Chowa, which … is in such close proximity to the plant that it too was contaminated with lead fume and lead-containing dust" and that "[t]he company must have known that they were subjecting the townships to lead pollution".[831]

788.1.4. He also concludes that lead emitted from the Mine between 1925 to 1974 "is likely to be a significant component of the lead in the environment to which residents of Kasanda, Makululu and Chowa are currently exposed".[832]

788.2. Professor Taylor, similarly, was briefed to focus on the KMC townships,[833] which is what he does.[834]

789. In short, in the founding papers and in respect of causation, the applicants only attempted to make out a triable issue in respect of the KMC townships. In answer, Anglo's experts confirmed that this focus on the KMC townships was appropriate:

789.1. Mr Sharma writes as follows:

> "Multiple studies have demonstrated that potential mining and processing impacts are present in a certain area near the Kabwe Plant and that these operations have had a limited impact, if any,

[831] Betterton report section 7 pp 001-1638 to 001-1639.

[832] Betterton report section 9 p 001-1639.

[833] Taylor report paras 1.2 and 6 p 001-1734.

[834] Taylor report pp 001-1752 to 001-1758.

in far field areas within the Kabwe District, the Proposed Class Area. Areas up to 20 km from the Kabwe Plant have been investigated, and potential impacts (defined as areas with soil concentrations greater than 400 mg/kg) have been identified in less than 2% of the Kabwe District."[835]

789.2. Dr Beck writes that median and mean BLLs are by far the highest in the KMC townships compared to the rest of the Kabwe district.[836]

789.3. Similarly, Professor Canning writes that the key variables determining BLLs are distance from the Mine and directionality. Those closer to the Mine have higher BLLs, and in particular those living west-north-west of the Mine (the prevailing wind direction) and south-east (the direction of waterflow). This is precisely where the KMC townships are located in relation to the Mine.[837]

790. In reply, the applicants attempted for the first time to make out a case on causation for a district-wide class: through an additional expert report filed by Professor Betterton ("the Betterton replying report") which applies the *"*AERMOD model*"* in an attempt to show that emissions from the Mine could have reached the entire district, and not just the KMC townships. But even this evidence is insufficient to make out a triable issue in respect of causation for the entire district:

790.1. First, even taken at face value, Professor Betterton's AERMOD

[835] Sharma report p 001-3236 para 1. See also the extracts at AA paras 754 to 757 pp 001-2942 to 001-2943.

[836] See the extracts at AA para 758 p 001-2944.

[837] Canning report para 33 p 001-3839.

modelling does not prove much:

790.1.1. All that he sets out to show is that *"*wind-borne emissions from the mine/smelter could potentially reach the entire district*"*.[838] But this is the wrong question. The correct question is whether sufficient wind-borne lead emissions from the Mine were transported throughout the district to justify a district-wide class – a question Professor Betterton does not attempt to answer. The question is not whether some lead could have reached the entire district. The question is whether enough of it did to have caused harm.

790.1.2. Professor Betterton is, moreover, forced to make up some of his variables. He openly admits that the *"*the concentrations reported in these figures are fictitious*"*.[839] Mr Sharma points out numerous other deficiencies in Professor Betterton's AERMOD methodology, including that instead of using five years of representative meteorological data, as recommended by the US EPA, he attempted to simulate the air transport of lead particles in four discrete, short-term assessments of six hours each;[840] and that Professor Betterton did not account for wind frequency or intensity.[841] As a result, his AERMOD

[838] Betterton reply para 9.1.6 p 001-9606.

[839] Betterton reply para 9.1.5 p 001-9606.

[840] Anglo's FA in strike-out application para 195.2.1 p 006-85; Sharma second report p 006-193.

[841] Anglo's FA in strike-out application para 195.2.3 p 006-86; Sharma second report p 006-188.

modelling produces results different from other models and studies on the issue.[842]

790.1.3. And Professor Betterton himself admits that his AERMOD modelling cannot itself be used to come to any sort of firm conclusion as to the extent to which the Mine could have polluted the entire district.[843]

790.2. Secondly, Professor Betterton's AERMOD modelling is convincingly refuted by Anglo's expert, Mr Sharma, in Anglo's further answering papers. Mr Sharma shows that Professor Betterton feeds inappropriate variables into the AERMOD model and that it produces anomalous results at variance with other studies on the issue.[844]

790.3. Thirdly, the approach taken in the Betterton replying report contradicts the applicants' case in the founding papers:

790.3.1. As we set out fully in section three, in Professor Betterton's first report, he argued that lead contamination from the Mine was the result of low smokestacks belching lead particles onto the nearby KMC townships.[845] He stated that "[c]himney stacks should … be designed to be tall enough,

[842] Anglo's FA in strike-out application para 195.3 pp 006-87 to 006-87; Sharma second report pp 006-197 to 006-199.

[843] Prof Betterton states that the AERMOD modelling was intended to be "used alongside other expert evidence and determination before firm conclusions could be drawn as to the role of the smelters and the tailings dump as the source of lead pollution in the outer reaches of the Kabwe district." (Betterton third report para 7.4 p 006-517.)

[844] Further AA paras 195.2 to 195.5 pp 006-85 to 006-89.

[845] Betterton first report p 001-1625; pp 001-1626 to 001-1628 and 001-1631 to 001-1634.

based on acquired experience, to adequately disperse the emissions".[846]

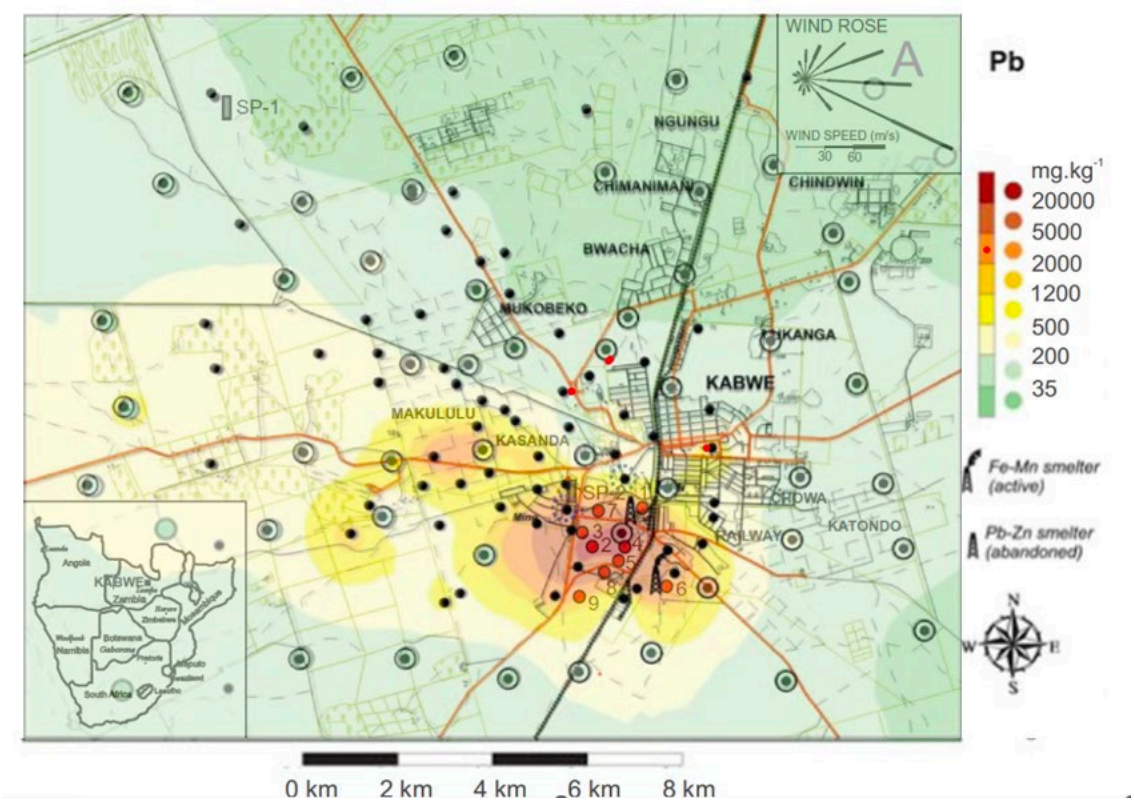
790.3.2. But in the Betterton replying report, Professor Betterton argues that the taller stacks operating during Anglo's involvement could have transported lead throughout the entire district; and that emissions from the shorter stacks operating before Anglo's involvement (i.e., before 1924) were "unlikely to have been widely dispersed throughout the Kabwe district".[847]

791. In their heads of argument, the applicants also rely on the "heat map" of Kabwe from the Kříbek study to make the point that "contamination is not contiguous with the KMC townships or any defined radius from the Mine".[848] We reproduce the heat map immediately below for convenience:

[846] Betterton first report p 001-1632.

[847] Betterton replying report para 11.2.1 p 001-9618.

[848] Applicants' HoA para 252.2 p 007-114.



792. The heat map does not support the applicants' case at all. It is, rather, a vivid illustration of why it is not in the interests of justice to certify classes outside the KMC townships:

792.1. First, the heat map shows how closely the contaminated areas track the KMC townships. It is not open to the applicants to claim otherwise in their heads, because in their founding affidavit they described the heat map as "illustrating a range of high topsoil concentrations (between 500 mg kg-1 and 20 000 mg kg-1) across areas covering Kasanda, Chowa and Makululu".[849] The applicants cannot now claim that the heat map shows something other than what they said it showed in their founding affidavit.

792.2. Secondly, the heat map dispels any doubt that a district-wide class is

[849] FA para 80.4 p 001-49.

grossly overbroad. It shows that the overwhelming majority of the Kabwe district has soil lead concentrations of less than 200 μg/kg^{-1}, significantly less than the *"*soil hazard standard for lead of 400 mg/kg in the US for bare soil where children play, set by the US Environmental Protection Agency (EPA)*"* relied on by the applicants in their founding affidavit.[850]

793. In short, the applicants fail to make out a triable issue in respect of causation for a district-wide class. At best for them, all that they showed is that there may be a triable issue on whether the Mine polluted the KMC townships. (And, for the sake of clarity, Anglo contends that on undisputed and indisputable evidence, the pollution did not come about during the relevant period but in earlier and later periods.)

794. There is a further reason unrelated to causation why the applicants fail to make out a triable issue for a district-wide class – foreseeability. As explained in section two above, even by the end of the relevant period (1974), the community around the Mine was far smaller than it is today. Even Chowa had only been established some years earlier to relocate families from the "bad sections" of Kasanda. The growth of the population of the broader Kabwe district was simply not foreseeable.

795. Anglo thus cannot have a duty of care in respect of the entire Kabwe district, and Anglo cannot have legally caused harm to residents of the entire district.

[850] FA para 80.4 p 001-49.

A district-wide class is not otherwise in the interests of justice

796. Apart from failing to make out a triable issue in respect of the entire district, there are other factors that make certification of a district-wide class not in the interests of justice.

797. The first is the composition of the applicants. All of them live in the KMC townships.[851] If the applicants wished for a district-wide class to be certified, it was incumbent on them to find applicants living outside the KMC townships.

798. The second factor is the work the applicants' attorneys have done on the ground in Kabwe. The applicants' South African attorneys are alleged to *"*represent*"* a further *"*1 058 individuals*"*, all of whom live in the KMC townships.[852] The applicants' attorneys have apparently not consulted with a single client living outside the KMC townships. The applicants cannot expect this Court to certify a district-wide class if they cannot bother themselves to talk to anyone outside the KMC townships.

799. The third factor militating against a district-wide class is how broad it would be. In *Children's Resource Centre*, Wallis JA cautioned against certifying an overly broad class:

> "[I]f the class is too wide, as in an Australian case where the original pleaded case included *'every man, woman and child who has been in this*

[851] At FA para 237 p 001-112, the applicants allege that *"*mos*t"* of the applicants live in the KMC townships. But from FA paras 241 to 253 pp 001-112 – 001-118, it is alleged that all of the applicants except the fifth live in either Kasanda, Chowa and Makululu, with the fifth respondent living in Makandanyama – but the applicants later concede that Makandanyama is part of Kasanda (FA para 295 p 001-131).

[852] FA para 295 p 001-131.

country between 1992 and 1999', the litigation will be unmanageable because of the need to take the personal circumstances of every person in the class into account. That indicates that a class action is inappropriate."[853]

800. The conception of harm the applicants offer in reply (essentially, any person with a non-zero BLL, even if that person is and feels perfectly healthy) means that a district-wide class would essentially be every woman under 50 and child residing in the Kabwe district (again, an area the size of Johannesburg). This is a class that is, in the words of Wallis JA, *"*unmanageable*"* – and a reason for limiting the proposed classes to the KMC townships.

801. The applicants argue in their heads that an extremely broad class would not prejudice Anglo, because even if the proposed classes are mostly made up of those with no claim, then those class members would *"*obtain no relief at trial and Anglo will suffer no material harm by their inclusion*"*.[854] This is preposterous:

801.1. It directly militates against the authority of the Supreme Court of Appeal as enunciated in *Children's Resource Centre*.[855]

801.2. The reasoning undermines the rationale of class definition, which is to include only those with a triable claim against the prospective defendant. This rationale is, in turn, informed by the rationale for requiring class certification itself, which is (to the extent relevant for class definition) both to protect the interests of those on whose behalf the applicants litigate;

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[853] *Trustees for the time being of Children's Resource Centre Trust v Pioneer Food (Pty) Ltd* 2013 (2) SA 213 (SCA) at para 30.

[854] Applicants' HoA para 237 pp 007-108 to 007-109.

[855] *Trustees for the time being of Children's Resource Centre Trust v Pioneer Food (Pty) Ltd* 2013 (2) SA 213 (SCA) at para 30.

and those of the defendant which is entitled to show at an early stage why the action should not proceed – in circumstances where the mere threat of lengthy and costly litigation may be used to induce a settlement even though the case lacks merit.[856]

The applicants' response in reply and in argument

802. In reply and in argument, the applicants offer several justifications for a district-wide class. All are bad.

803. The primary justification is that the KMC townships "do not have officially demarcated boundaries" so that limiting the proposed classes to the KMC townships would make it difficult for residents of Kabwe to know whether they fall within the proposed classes or not.[857]

804. This is rank opportunism. The applicants had no problem demarcating the KMC townships in their founding papers. It is only after Anglo proposed in answer limiting the proposed classes geographically that the applicants suddenly claim not to know where the KMC townships begin or end:

804.1. The body of the founding affidavit contains numerous references to the KMC townships, with no indication that their borders cannot be identified.[858] The applicants' experts and the various studies they and the applicants rely on sensibly and repeatedly refer to the KMC

[856] *Trustees for the time being of Children's Resource Centre Trust v Pioneer Food (Pty) Ltd* 2013 (2) SA 213 (SCA) at para 24.

[857] RA paras 390 to 392.3 p 001-7731; Applicants' HoA paras 250 – 250.3 pp 007-112 to 007-113.

[858] See, for example, FA paras 76 to 80.9 pp 001-46 to 001-50.

townships as identifiable entities. Indeed, as explained above, the applicants' case in the founding papers was entirely based on the KMC townships.

804.2. The applicants themselves are in no doubt as to where they live. The founding affidavit states without equivocation where each applicant lives, and it is either in Kasanda, Makululu or Chowa (or, in the case of the fifth applicant, in Makandanyama, which is part of Kasanda).[859]

804.3. The applicants know exactly where each of the further 1 058 individuals that Mbuyisa Moleele represents live:

> "In addition to the thirteen class representatives, Mbuyisa Moleele represents a further 1058 individuals in this action. … The majority of the individuals live in Makululu (479). 401 live in the community of Kasanda (including the communities of Maganda and Makandanyama) and a further 178 live in Chowa."[860]

804.4. The applicants briefed Professor Thompson to estimate how many children with particular BLLs live in Kasanda, Chowa and Makululu.[861] She had no difficulty doing so for each district,[862] drawing on the "Kabwe Lead Stats report" which provides "2017 population sizes … for [the] Chowa, Makululu and Kasanda districts".[863]

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[859] FA paras 241 to 253.3 pp 001-112 to 001-118.

[860] FA para 295 p 001-131 (emphasis added).

[861] Thompson report paras 3(b), 3(d), and 3(f) pp 001-1662 to 001-1663.

[862] Thompson report paras 21 to 29 pp 001-1673 to 001-1678.

[863] Thompson report para 8(a) p 001-1665.

805. Moreover, the belated claim in reply that the borders of the KMC townships cannot be determined is made by Ms Sonia Mbuyisa, the applicants' South African attorney. The claim is not supported by a confirmatory affidavit from an applicant, or any resident of Kabwe. Ms Mbuyisa does not explain how she could have any personal knowledge of what Zambians know or do not know about the borders of the KMC townships.

806. This Court can therefore reject out of hand the applicants' belated claim that the KMC townships are an insufficiently specific basis on which to define the proposed classes.

807. There are two additional reasons why any uncertainty at the margins as to the borders of the KMC townships should not prevent this Court from limiting the class to the KMC townships:

807.1. The first is that a crucial part of the applicants' proposed class definition is far vaguer than the boundaries of a township, namely the applicants' conception of *"*injury*"*. It is far easier for a Kabwe resident to know whether she lives inside or outside the KMC townships than it is for her to know that she suffers from an *"*increased risk" of "developing" (to pick some examples) "behavioural problems", "[m]ale infertility", or "[d]ecreased growth" as a result of "exposure to lead pollution*"*.[864] If the applicants want this Court to endorse a class based around their nebulous conception of *"*injury*"*, they cannot in good faith object to a

[864] Draft POC paras 54 to 54.20 pp 001-184 to 001-185.

class limited to the KMC townships.

807.2. Secondly, if there is a dispute as to whether a person lives in the KMC townships, this can be determined in the second phase, when each class member must prove their individual claim. Any lingering uncertainty as to where the KMC townships begin or end is no reason not to define the classes appropriately at the certification stage.

808. The second defence the applicants offer for a district-wide class is to offer an extremely lax test for the determination of a class boundary:

> "The real definitional test is whether the boundary line could be drawn more narrowly, without arbitrarily excluding those who have an interest in the determination of such issues".[865]

809. As support for this test, the applicants cite in their heads a Canadian case – *Hollick*.[866] But this is not the test in South Africa. Here, the test for determining an appropriate class definition, as for all other aspects of certification, is whether it is in the interests of justice to certify an extremely broad class. For the reasons given above, it is not.

810. The applicants' reliance on *Hollick* is in any event selective and inapposite. The paragraph on which the applicants rely makes it clear that certification should be denied (or narrowed) if the class can be defined more narrowly:

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[865] RA para 395 p 001-7732.

[866] *Hollick v Metropolitan Toronto (Municipality)* 2001 SCC 68 para 21, cited at applicants' HoA para 234 pp 007-107 to 007-108.

> "There must be some showing, however, that the class is not unnecessarily broad – that is, that the class could not be defined more narrowly without arbitrarily excluding some people who share the same interest in the resolution of the common issue. Where the class could be defined more narrowly, the court should either disallow certification or allow certification on condition that the definition of the class be amended."[867] (Emphasis added.)

811. Thirdly, the applicants argue that limiting the class to the KMC townships would exclude people with high BLLs who do not live in the KMC townships and that this would be *"*plainly arbitrary*"*.[868]

812. This is incorrect. The exclusion of those with high BLLs living outside the KMC townships from the class would not be arbitrary. They would be excluded for a good reason, which is that they are differently situated to those in the KMC townships. For the reasons given above, and at best for the applicants, only those living in the KMC townships could ever have a triable case against Anglo. The high BLL of anyone living outside the KMC townships is not something for which Anglo could ever be tortiously liable.

Conclusion on geographical scope of the class

813. If this Court is minded to certify, it should limit the proposed classes to those resident in the KMC townships. The applicants do not make out a triable case in respect of a broader class, and the interests of justice do not otherwise favour the certification of such a class.

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[867] *Hollick v Metropolitan Toronto (Municipality)* 2001 SCC 68 para 21 (emphasis added).

[868] RA paras 400 to 410 pp 001-7733 to 001-7735.

The class definition is overbroad because it includes people who have not suffered any injury

Applicable legal principles

814. Zambian law is clear: for there to be a claim in tort of negligence, there must be an injury. The Zambian Supreme Court has confirmed that without an injury there is no tort.[869]

815. In essence, an action for damages for personal injuries cannot be founded on a trivial injury, and what is trivial is a question of fact and degree. Moreover, a *"*transient, trifling, self-limiting, reversible reaction to an irritant is not 'actionable injury' for the purposes of the law of tort*"*.[870]

816. The courts have, however, used largely "circular formulations*"* to describe what is meant by an injury that is more than negligible.[871] The connecting thread is the seriousness or materiality of the damage.[872]

817. Damage in this sense is an abstract concept of being worse off, physically or economically, so that compensation is an appropriate remedy. It does not mean simply a physical change, which is consistent with making one better, as in the

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[869] *Michael Chilufya Sata v Zambian Bottlers Limited* SCZ No 1 of 2003 at p 13.

[870] *Saunderson v Sonae Industria (UK) Ltd* [2015] EWHC 2264 (QB) para 179 (per Jay J).

[871] Per Jay J in *Greenway and others v Johnson Matthey Plc* [2014] EWHC 3957 (QB), para 26. His criticism was echoed by Sir Terence Etherton, MR, in *Carder v University of Exeter* [2016] EWCA Civ 790 at 22.

[872] *"*Personal injury beyond what can be regarded as negligible, even when that injury is unknown to and cannot be discovered by the sufferer*"*: *Cartledge and others v E. Jopling & Sons Ltd* [1963] 2 W.L.R. 210, [1963] A.C. 758, per Reid LJ, para 772; *"*real damage as distinct from purely minimal damage*"*: *Cartledge*, per Evershed LJ, para 774; *"*whether a man has suffered material damage by any physical changes in his body*"*: *Cartledge*, per Pearce LJ at para 779.

case of a successful operation, or with being neutral, having no perceptible effect upon one's health or capability.[873]

818. For example, in *Rothwell,* the House of Lords found that pleural plaques caused by exposure to asbestos dust – areas of fibrous thickening of the pleural membrane which surrounds the lungs – did not constitute actionable damage.

818.1. This was because the plaques themselves had no adverse effect on any bodily function and did not themselves have the propensity to develop into an asbestos-related disease; *"*they signal the presence in the lungs of pleura of asbestos fibres which may independently cause life-threatening or fatal diseases such as asbestosis or mesothelioma*".*[874]

818.2. The House of Lords rejected the argument that the physical changes to the claimants' bodies (development of plaques), coupled with the risk of future injury from exposure to asbestos and the anxiety consequent upon that risk (the "aggregation theory"), could provide a cause of action in negligence. The identification of pleural plaques has an "evidential" rather than a "substantive" significance. Thus, their existence confirms the significant permanent physical penetration of asbestos fibres but does not add in any way to the resultant disabilities, actual or prospective.[875]

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[873] *Rothwell v Chemical Insulating Co* [2007] UKHL 39; [2008] 1 AC 281 at para 7.

[874] *Rothwell v Chemical Insulating Co* [2007] UKHL 39; [2008] 1 AC 281 at para 7.

[875] Gibson affidavit para 112 pp 001-3976 to 001-3977.

The applicants' attempt at avoiding the problem

819. On the face of it, the applicants have recognised that only people who have suffered an injury as a result of exposure may be included in the class.

819.1. The fourth requirement for inclusion in the first class is *"children …. who have suffered injury as a result of exposure to lead".*

819.2. Similarly, the fifth requirement for inclusion in the second class is *"women of child-bearing age … [who] have suffered injury as a result of exposure to lead".*

820. But, of course, the real question is what is meant by the applicants' phrase *"have suffered injury as a result of exposure to lead".*

820.1. That phrase, by itself, does not make anything clear – to Anglo, to the Court or, most importantly, to the prospective class members who must decide whether to opt in or opt out.

820.2. For the applicants' proposed class notice to tell prospective class members that the class consists of persons who, *inter alia*, "suffered injury from lead exposure" (the first class") or "suffered injury from lead poisoning" (the second class) is, with respect, entirely meaningless and unhelpful.

821. It is therefore necessary to consider what the applicants' case is on this score. In their heads of argument, the applicants contend that they have pleaded "three sets of actionable injuries and harm":

"384.1 First, the class members have suffered and are at risk of developing a range of 'sequelae' injuries due to exposure to lead, including brain damage, organ damage, neurodevelopmental problems, gastrointestinal symptoms, among a range of others;

384.2 Second, the class members have suffered injuries per se where they have elevated BLLs requiring medical monitoring, including venous blood lead monitoring and intervention; and

384.3 Third, the sub-class of girl children and the class of women of child-bearing age, who have been pregnant or are capable of falling pregnant, have suffered further harms due to the risk of lead-related injuries in pregnancy."[876]

Medical monitoring and intervention do not amount an actionable injury

822. We begin with the second of these three categories – the contention that class members have "suffered injuries *per se*" when requiring medical monitoring.

823. This is indeed consistent with the applicants' pleaded case in the founding affidavit where they allege that:

823.1. 'the negligent causation of a BLL requiring medical monitoring and intervention would constitutes [sic] an actionable injury per se*';*[877] and

823.2. a BLL of 5 µg/dL or more requires medical monitoring and intervention.[878]

824. But this core proposition – that medical monitoring and intervention necessarily

[876] Applicants' HoA para 384 p 007-175.

[877] FA para 234 p 001-110.

[878] FA para 230 p 001-109.

constitute actionable injuries – is not sustainable.

824.1. Some medical interventions may be so minimal or of such marginal benefit that it does not pass the threshold of an actionable injury.[879]

824.2. Moreover, there appears to be no precedent, in either the UK, Zambia or other commonwealth jurisdictions, to support the proposition that medical monitoring, *per se*, constitutes actionable damage. There is also no precedent for the notion that a *de minimis* injury and later effects or consequences of that injury can be lumped together to create actionable damage.

824.3. The nearest applicable statement of principle is from the Supreme Court of Michigan in *Dow Chemical Company*[880], which said of attempts to found actionable damage on the financial outlay of medical monitoring:

> "It is no answer to argue, as plaintiffs have, that the need to pay for medical monitoring is itself a present injury sufficient to sustain a cause of action for negligence. The fact remains that these economic losses are wholly derivative of a possible, future injury rather than an actual, present injury."

824.4. There is further no support for the proposition that an additional, free standing, award of damages is available for the infringement of the patient's right of autonomy or interference with the patient's bodily integrity (flowing from medical monitoring or trifling interventions such as

[879] Hermer second affidavit para 38 p 001-9714.

[880] *Henry v Dow Chemical Company* 473 Mich 63; 701 NW2d 684 (2005).

blood tests).[881]

824.5. Further, medical tests (such as taking x-rays or blood tests) are not in themselves actionable damage. Medical monitoring and intervention may be part of the evidence-gathering and a means to discover damage, but is not actionable itself or part of the injury. The cause of action in negligence is complete when the personal injury is suffered, not upon the monitoring of the effects of exposure to a noxious substance. Monitoring and prognosis provide evidence as to the severity of the initial damage, but does not of itself affect the severity of that damage.[882]

825. On this basis alone, the applicants' approach to class definition is unsustainable and overbroad.

The "risk" of future injury approach is not sustainable

826. That leaves the first and third categories relied on by the applicants: class members who have suffered and are at risk of developing a range of "sequelae" injuries due to exposure to lead; and girls and women who have suffered further harms due to the risk of lead-related injuries in pregnancy.

827. We accept that where a person has actually suffered an injury as a result of lead exposure – the applicants' examples are brain damage, organ damage, neurodevelopmental problems and gastrointestinal symptoms[883] – this would

[881] *Shaw v Kovac* [2017] EWCA Civ 1028 paras 65 to 69.

[882] *Cartledge v E Jopling & Sons Ltd* [1963] A.C. 758.

[883] Applicants' HoA para 3384.1 p 007-175.

amount to an actionable injury.

828. But the difficulty is that the applicants' understanding of an injury or harm goes far beyond this – hence the overbreadth. They would include in the classes persons who have not yet actually suffered one of the four injuries just mentioned, but are merely said to be at risk of doing so. Similarly, they would include girls and women whose injury is said to be the risk of lead-related injuries flowing from pregnancy.

829. This is not sustainable. A cause of action cannot succeed for "risks" of injury which have not yet come into fruition.[884] A claim only becomes actionable when all elements of a cause of action, including injury or loss, have crystallised. Indeed, the applicants are driven to accept this.[885]

830. But they seek to avoid this principle by relying on the principle that, where some actionable injury has been caused, such that a cause of action has crystallised, the victim can recover damages not only for the injuries already accrued but also for the risk of it worsening in the future or new injuries arising.[886]

831. That principle cannot assist them and is a clear attempt by the applicants to shore up the deficiency in their case through their heads of argument. The difficulty for the applicants is that in their papers, they contemplate including individuals into the proposed classes who have not yet suffered any actionable injury.

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[884] See, e.g. *Gregg v Scott* [2005] 2 AC 176.

[885] Applicants' HoA para 393 p 007-179.

[886] See, e.g., *Rothwell v Chemical & Insulating Co Ltd* [2007] UKHL 39; [2008] 1 AC 281 paras 14 and 67.

832. Firstly, it is apparent from their large-scale reliance on epidemiological studies in their replying and subsequent affidavits that the applicants seek to secure an unwieldly large class. Their reliance on these epidemiological studies (particularly through the reports of their expert, Prof Bellinger) clearly goes towards establishing the probability of risk of injury eventuating.

833. Secondly, the applicants have asked their English law expert, Mr Hermer KC to opine on the likely approach of the English court to causation and whether, under English law claimants with "no discernible symptoms with a lead level below the level required for chelation treatment, but one which is nevertheless associated with a significantly increased risk of injury" will be "considered to have sustained actionable damage".[887] Once again, they clearly do so for no reason other than seeking to secure as large a class possible which includes individuals who may or may not be at risk – but who have not suffered an actual injury.

Conclusion on injury issue

834. The applicants' proposed classes are therefore overbroad because they include in them persons who have not suffered an injury caused by lead exposure.

835. As we have explained above, the difficulty is not so much the wording of the class requirements – which rightly recognise that a class member must "have suffered injury as a result of exposure to lead" – but rather the applicants' understanding of what this means. The way the applicants understand this concept is untenable as a matter of law. And this is no minor matter – it goes directly to the question

[887] Hermer para 5(2)(ii)(b) p 001-2283.

of how people will know that they are or are not part of the classes.

The class definition should exclude those whose claims are time-barred

836. The second proposed class (the women class) is, in addition, overbroad because it would include those with claims that have long ago become time-barred. If this Court is minded to certify, the relevant class definition should be narrowed accordingly.

837. In this section, for the purpose of the issue of time bars, we assume for the sake of argument that the claims prospective class members may bring are otherwise good. This must not be construed as a concession.

838. It bears emphasis at the outset that the applicants have rightly conceded in their heads of argument that if the Zambian statute of limitations applies, the women class would include many claims that have become time-barred. They are thus forced to make the strained argument that South African prescription law should apply – an argument which falls to be rejected.

<u>The applicable statute of limitation is Zambian</u>

839. Under South African choice-of-law rules, procedural matters are governed by the *lex fori* (the domestic law of the country in which proceedings are instituted) and matters of substance are governed by the *lex causae* (the law which governs the underlying dispute).[888] It is common cause that in this dispute, the *lex fori* is South

[888] *Society of Lloyd's v Price* [2006] ZASCA 88; 2006 (5) SA 393 (SCA) at para 10.

African law, and the *lex causae* is Zambian law.[889]

840. A prescription statute which extinguishes a right is regarded as substantive, but one which merely bars enforcement of the right is procedural.[890]

841. Prescription under the South African Prescription Act, 68 of 1969 extinguishes rights, and so prescription in South Africa (the *lex fori*) is a matter of substance. This classification would exclude the application of South African prescription law to the dispute and point to the application of Zambian rules.

842. It is, however, common cause that the Zambian statute of limitation is procedural[891] (because the Zambian statute merely bars enforcement of the relevant right, and does not extinguish it). This classification would exclude the application of the Zambian rules.

843. There is thus a *"gap"*.[892] In such a case, a South African court *"*must take into account policy considerations in determining which legal system has the closest and the most real connection with the legal dispute before it*"*.[893]

844. In this matter, there is no contest. Patently, the jurisdiction with the *"*closest and most real connection*"* with this dispute is Zambia. The applicants and every member of the proposed classes reside in Zambia, the cause of action arose in

[889] Draft POC para 19 p 001-156; AA para 947.4 p 001-3028.

[890] *Society of Lloyd's v Price* [2006] ZASCA 88; 2006 (5) SA 393 (SCA) at para 10.

[891] AA para 780 p 001-2951; admitted at RA para 418.3 p 001-7737.

[892] To borrow the words of Van Heerden JA in *Society of Lloyd's v Price* [2006] ZASCA 88; 2006 (5) SA 393 (SCA) at para 22.

[893] *Society of Lloyd's v Price* [2006] ZASCA 88; 2006 (5) SA 393 (SCA) at para 26.

Zambia, and the Mine is in Zambia.[894] It follows that the Zambian statute of limitation is applicable.

The Zambian statute of limitation

845. The time-barring of claims in Zambia is governed by the (English) Limitation Act of 1939 ("the Limitation Act"), and section 2(1) of that Act provides as follows:

> "The following actions shall not be brought after the expiration of six years from the date on which the cause of action accrued, that is to say:
>
> (a) actions founded on a simple contract or on tort."

846. The Law Reform (Limitation of Actions, etc) Act of Zambia ("the Law Reform Act") has replaced the six-year period in the Limitation Act with a three-year period. As such, a tortious claim under Zambian law becomes time-barred three years after the relevant cause of action accrued.[895] Whether the claimant is aware that she has suffered a loss is irrelevant to whether a cause of action has accrued.[896] This account of Zambian law of on limitation of claims is common cause.[897]

847. Section 22 of the Limitation Act (as amended by the Law Reform Act) provides that if a person is under a *"*disability*"* at the time that a cause of action accrues, then the claim prescribes three years after the person ceases to be under the disability. Section 31(2) provides that a person is under a disability if that person

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[894] For a full list of the factors linking the case with Zambia, see AA paras 947 to 947.10 pp 001-3028 to 001-3029.

[895] AA paras 780 to 781 pp 001-2951 to 001-2952. The applicants do not contest that this is what Zambian law provides. Rather, they contest that Zambian law is applicable at all (RA paras 415 to 422 pp 001-7736 to 001-7738; RA paras 615 to 615.4 p 001-7801).

[896] *Cartledge v E Jopling & Sons, Ltd* [1963] 1 All ER 341.

[897] Applicants' HoA paras 265 to 265.3 p 007-120; paras 270 to 270.4 pp 007-122 to 007-123.

is an *"infant"*, meaning that she has not yet reached the age of majority. In Zambia, the age of majority is eighteen.[898] Thus, if a member of the second class suffered harm before she was eighteen, her claim would be time-barred three years after her eighteenth birthday.

The second proposed class includes plaintiffs whose claims are time-barred

848. For the reasons set out below, if the Zambian statute of limitation applies, the women class is largely made up of people whose claims have become time-barred. As mentioned, the applicants concede this.[899]

849. The cause of action of a member of the proposed classes would accrue when both of the following conditions obtain:

849.1. when the respondent had negligently breached its duty of care; and

849.2. when the class member had suffered harm.

850. For all members of the proposed classes, the very latest that Anglo could conceivably be said to have negligently breached its duty of care is 1974 – when, according to the applicants, Anglo ceased to control the Mine[900] and (in their words) handed over to the Zambian authorities *"*a Mine that did not have the necessary equipment, policies, procedures and systems to minimise the risk of lead pollution*"*.[901]

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[898] Under article 266 of the Zambian constitution, the age of majority is eighteen.

[899] Applicants' HoA paras 270 to 272 pp 007-122 to 007-124.

[900] Draft POC para 44 p 001-171; para 52.5 p 001-182.

[901] Draft POC para 52.5 p 001-182.

851. When would a member of the proposed classes have suffered harm? The applicants intend to plead the following forms of harm:

851.1. various listed injuries or the increased risk of developing such injuries, all resulting from *"exposure to lead pollution"*;[902]

851.2. for class members who are capable of falling pregnant, elevated BLLs that increase the risk of incurring various injuries during pregnancy;[903]

851.3. elevated BLLs *per se*;[904] and

851.4. the "resulting harms suffered by the members of the classes because of exposure to lead" flowing from high levels of lead pollution in the Kabwe district.[905]

852. The upshot is that, as the applicants intend to plead harm, every member of the proposed classes would have suffered harm when he or she has been exposed to lead so as to elevate his or her BLLs sufficiently or when he or she actually develops a lead-related malady (whichever is earlier). At this point, the class member became entitled to the various heads of damages listed in paragraph 59 of the draft POC: past and future medical expenses,[906] past and future loss of

[902] Draft POC paras 54 to 53.21 pp 001-184 to 001-185.

[903] Draft POC paras 55 to 55.5 pp 001-185 to 001-186.

[904] Draft POC paras 56 to 56.4 pp 001-186 to 001-187.

[905] Draft POC para 58 p 001-187.

[906] Draft POC paras 59.1 to 59.2 p 001-187.

earnings,[907] damages associated with remediation,[908] and general damages.[909]

853. It follows that, as the applicants intend to plead their case, every member of the proposed classes had a cause of action that accrued the moment he or she had an elevated BLL, or developed an allegedly lead-related malady, after 1974.

854. It follows that the second proposed class (women of child-bearing age) is overbroad for including thousands of plaintiffs whose claims have become time-barred. As such, if this Court is minded to certify, it should certify the second class so as to exclude plaintiffs whose claims have clearly become time-barred, namely women who had both —

854.1. turned eighteen; and

854.2. suffered an injury (meaning, on the applicants' case, having acquired an elevated BLL or having developed an allegedly lead-related malady);

more than three years before the institution of this application (in other words, before 20 October 2017).[910]

<u>The applicants' defences to the time-bar are untenable</u>

855. Given that the applicants concede in their heads of argument that Anglo's time-bar point is good if the Zambian statute of limitations applies, they are left with only one argument: that South African prescription law should apply, and not

[907] Draft POC paras 59.3 to 59.4 p 001-187.

[908] Draft POC paras 59.5 to 59.6 p 001-188.

[909] Draft POC para 59.7 p 001-188.

[910] The applicants appear to concede that this would be the cut-off date (RA para 419.1 p 001-7737).

Zambian law. But this point too is bad.

856. First, the applicants claim that it *"*is not clear*"* whether South African prescription law is substantive.[911] If this were so, it might follow that there is no *"gap"* and South African prescription law would apply by default as the procedural law of the *lex fori*. But South African prescription law is substantive. The Supreme Court of Appeal could not have been clearer in *Lloyd's v Price*:

> "[T]o determine, according to principles of South African law (the *lex fori*), whether prescription in terms of the Act is substantive or procedural – is perfectly straightforward. In South African law, it is clear that prescription extinguishes a right. Section 10(1) of the [South African Prescription] Act provides that –
>
> > 'Subject to the provision of this Chapter and of Chapter IV, a debt shall be extinguished by prescription after the lapse of the period which in terms of the relevant law applies in respect of the prescription of such debt.'
>
> This means that prescription, in South Africa, is characterised or classified as a matter of substantive law".[912]

857. Contrary to what the applicants say in their heads of argument, this is equally the position in the Constitutional Court. In *Food and Allied Workers Union obo Gaoshubulwe* the Court said

> "In this sense, section 191(2) is procedural as opposed to substantive in nature. The difference between procedural and substantive prescription periods was described in *Society of Lloyd's*, where the Supreme Court of

[911] Applicants' HoA para 266 pp 007-120 to 007-121.

[912] *Society of Lloyd's v Price* [2006] ZASCA 88; 2006 (5) SA 393 (SCA) at paras 15 – 16 (emphases added).

> Appeal distinguished between statutes that extinguish a right and those that bar a remedy by imposing a procedural bar on the institution of an action. In this regard, section 191 deals with what may be described as matters of a procedural nature while the Prescription Act deals with what is described as substantive in nature. This distinction is important in that it contemplates a substantive issue such as prescription and a procedural matter such as a time bar running along parallel tracks and having different objectives. The former regulates and imposes a cut-off period in respect of litigation while the latter seeks to regulate, through the imposition of time bars, the procedure to be followed in asserting a right. They are separate and distinctive processes and indeed can operate in harmony with each other when one is interlaid with the other."[913]

858. The Constitutional Court recently reaffirmed its approval of *Society of Lloyd's*.[914]

859. So, the applicants retreat to their second point: that whether South African or Zambian rules of limitation are applicable is "a complex matter of private international law" that cannot be determined at certification stage.[915]

860. This both misstates the role of the certification court and exaggerates the difficulty of determining the applicable limitation rules:

860.1. In *De Bruyn*, Unterhalter J made it clear that a certification court should decide legal questions at certification stage if it can:

> "These matters are well understood in exception proceedings and they are no less of application for the purpose of considering

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[913] *Food and Allied Workers Union obo Gaoshubulwe v Pieman's Pantry (Pty) Ltd* [2018] ZACC 7; 2018 (5) BCLR 527 (CC) at para 184 (per Kollapen AJ for the majority).

[914] *Competition Commission of South Africa v Pickfords Removals SA (Pty) Ltd* [2020] ZACC 14; 2021 (3) SA 1 (CC) at para 33.

[915] RA para 417.3 p 001-7737; applicants HoA para 260.2 p 007-18.

whether there are triable issues in an application for certification. When a court is asked to consider whether there are triable issues in a certification application, and a novel question of law arises, the court should decide the question of law if it can do so. A determination by the certification court of the question of law will then inform its consideration of whether there are triable issues. If the certification court cannot determine the question of law because it is best left to the trial court to do so, then that conclusion will also inform the consideration as to whether there are triable issues. It is in this situation that it may be said that if the point of law is arguable and is best determined at trial with the benefit of evidence heard by the trial court, then that will weigh in favour of the conclusion that there are triable issues for the purposes of assessing certification."[916]

860.2. There is nothing "complex" about determining the applicable limitation rules and they do not turn on matters of fact not before this Court. There is more than enough information before this Court to determine the jurisdiction that has the "closest and the most real connection" with this dispute – and the applicants cannot seriously dispute that it is Zambia.

861. The applicants then argue that if this Court is minded to decide the choice-of-law question, it should apply South African prescription law. They argue that determining the applicable limitation regime is "a policy-laden decision, to be made on a case-by-case basis, aimed at ensuring individual justice" and that Zambian law should not apply because it would non-suit members of the women

[916] *De Bruyn v Steinhoff International Holdings NV* 2022 (1) SA 442 (GJ) at para 21.

class whose claims have prescribed.[917]

862. This submission involves, it cannot be emphasised enough, an important concession – that if Zambian law applies, the claims of the women class have largely become time-barred. And the argument that South African prescription law should apply is untenable, for the following reasons:

862.1. First, it completely misstates the choice-of-law rule enunciated in *Society of Lloyd's*.[918] The question is not which limitation regime would ensure *"*individual justice*"*. The question is which regime has the closest connection to the dispute – and the answer cannot be anything other than Zambia.

862.2. Secondly, the choice-of-law approach proposed by the applicants is absurd. They argue that the Zambian statute of limitation should not be applied because it would non-suit some class members with otherwise good claims. But that is the point of limitation rules: to non-suit those with otherwise good claims because they took too long to bring them. This is not *"*an objectionable infringement of the right of access to justice*"*[919] or *"*contrary to public policy*"*.[920] This is just what time-bar rules do.

862.3. This type of argument has been tried in England, and did not meet with success. In *Jalla*, Shell was faced with a class action for an oil spill that

[917] RA paras 419 to 420 pp 001-7737 to 7738.

[918] *Society of Lloyd's v Price* [2006] ZASCA 88; 2006 (5) SA 393 (SCA) at para 26

[919] RA para 420 p 001-7738.

[920] Applicants' HoA para 272 pp 007-123 to 007-124.

had occurred off the coast of Nigeria in 2011. Shell raised the defence that the claim had become time-barred. Counsel for the claimants argued that non-suiting class members through prescription was unjust and would result in the alleged polluter *"*getting off*"*.[921] The Court of Appeal rejected the argument:

> "In my view, these submissions were misplaced. This appeal is not a question of anybody 'getting off'; on the contrary, the judge found an arguable claim on the merits. It is instead a question of the operation of the applicable limitation period. That might be regarded as an artificial cut-off, particularly by those who may have failed to comply with the relevant statutory period, but it remains the law."*[922]*

862.4. Thirdly, the applicants ignore the purpose of limitation rules, which is to bring certainty and stability to social and legal affairs and to maintain the quality of adjudication. The legitimacy of these purposes has been endorsed by the (South African) Constitutional Court.[923] By enacting limitation rules, a legal system decides that, after a certain period of time, a claimant's interest in prosecuting a claim that may otherwise be good must yield to the interests of certainty and stability. There is nothing

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[921] *Jalla v Shell International Trading and Shipping Company* [2021] EWCA Civ 63 para 47.

[922] *Jalla v Shell International Trading and Shipping Company* [2021] EWCA Civ 63 at para 48.

[923] *Road Accident Fund v Mdeyide* 2011 (2) SA 26 (CC) at para 8:

> "This court has repeatedly emphasised the vital role time limits play in bringing certainty and stability to social and legal affairs, and maintaining the quality of adjudication. Without prescription periods, legal disputes would have the potential to be drawn out for indefinite periods of time, bringing about prolonged uncertainty to the parties to the dispute. The quality of adjudication by courts is likely to suffer as time passes, because evidence may have become lost, witnesses may no longer be available to testify, or their recollection of events may have faded. The quality of adjudication is central to the rule of law. For the law to be respected, decisions of courts must be given as soon as possible after the events giving rise to disputes, and must follow from sound reasoning, based on the best available evidence."

unjust about this.

862.5. Fourthly, the Zambian legislature has decided that Zambian tortious claims should become time-barred three years after the cause of action accrued, unless a disability applies. This Court should respect this policy choice. Zambian claimants should not be permitted to escape Zambian rules of limitation in respect of what is a Zambian dispute merely because they chose to sue in another jurisdiction.

Conclusion on the time-bar

863. The applicants have conceded that if the Zambian statute of limitation applies, the second proposed class is mostly made up of time-barred claims. The Zambian statute clearly applies. It follows that most of the claims in the second proposed class are time-barred. If this Court is minded to certify, the second class should be limited appropriately.

Conclusion on class definition

864. If this Court is minded to certify, it should narrow the proposed classes in three respects.

864.1. First, both proposed classes should be narrowed geographically, so as to include only those who reside in the KMC townships.

864.2. Second, both proposed classes should be narrowed to make clear that they only include persons who have already suffered an actual injury as a result of lead exposure.

864.3. Third, the second proposed class should be narrowed to exclude those whose claims have become time-barred.

865. To effect this, the proposed class definitions at paragraphs 1.1 and 1.2 of the notice of motion[924] could be amended as follows (insertions are underlined, **bold** is in the original):

> "1.1 The class of **children**, comprising:
>
> 1.1.1 Children under the age of 18 on the date that the certification application was launched;
>
> 1.1.2 Who reside in Kasanda, Makululu and Chowa in the Kabwe District, Central Province, Zambia;
>
> 1.1.3 In the case of children over the age of seven, have lived in the Kabwe District for at least two years between the ages of zero and seven; and
>
> 1.1.4 Who have suffered injury as a result of exposure to lead.
>
> 1.2 The class of **women of child-bearing age**, comprising:
>
> 1.2.1 Women over the age of 18 and under the age of 50 on the date that the certification application was launched;
>
> 1.2.2 Who reside in Kasanda, Makululu and Chowa in the Kabwe District, Central Province, Zambia;
>
> 1.2.3 Have lived in the Kabwe District for at least two years between the ages of zero and seven;
>
> 1.2.4 Have been pregnant or are capable of falling pregnant; and
>
> 1.2.5 Have suffered injury as a result of exposure to lead;

[924] NoM p 001-2.

but excluding women who, prior to 20 October 2017, both (a) were eighteen or older and (b) had suffered an injury as a result of exposure to lead."

866. These amendments would cure the first and third overbreadth difficulties. The second overbreadth difficulty can only be cured by the applicants proposing a new class definition or by this Court making clear in its judgment the correct meaning of "injury as a result of exposure to lead". At the very least, those that bear no more than risks of injury should be excluded.

SECTION NINE: THE APPLICANTS' FUNDING ARRANGEMENTS ARE NOT APPROPRIATE

Introduction

867. The funding arrangements should not be certified because they are unlawful and not in the interests of justice.[925]

868. Anglo addressed several pointed concerns with the funding arrangements in its answering affidavit. In reply, the applicants make out a different case in many respects, in a belated effort to address patent illegalities and contradictions in the various agreements. They have been forced to make significant amendments to several funding agreements in doing so.

869. Notwithstanding Anglo's contention that the applicants must stand or fall by their founding papers, we address the case as made out in reply (without conceding that the applicants' approach is permissible). We address the following specific reasons why the funding scheme should not be certified even on the version in reply:

    869.1. The scheme proposes an excessive return to the litigation funders, who stand to make many multiples on their investment.[926] Amongst others, the return offends the spirit of the Contingency Fees Act, 66 of 1997 if not its letter.

    869.2. The amended Contingency Fee Agreement is itself unlawful under the

[925] AA para 827 p 001-2970.

[926] AA para 827.2 p 001-2970.

Contingency Fees Act.

869.3. The amount of funding is insufficient to guarantee the capacity of the class representatives to litigate the class action to completion.[927]

869.4. The nature and amount of after-the-event ("ATE") insurance cover against an adverse costs order are inadequate, which leaves Anglo exposed to the risk of non-recovery.[928]

869.5. The funding arrangements prejudice the ability of the class representatives and members to influence and control the case, relative to the funders. We demonstrate that, as a result, conflicts of interest arise between the class members and the funders and attorneys which exacerbate existing conflicts within the classes.[929]

How the funding operates

870. The applicants' heads of argument provide a brief overview of the key role players and documents governing the funding scheme.[930] We emphasise the following, which is omitted from their description.

871. It is common cause that Kabwe Finance Limited ("KFL") is merely a shell that has been set up to channel the funds, having no economic substance,

[927] AA para 827.5 p 001-2970.

[928] AA para 827.6 p 001-2971.

[929] AA para 827.4 p 001-2970.

[930] Applicants' HoA paras 562 to 564 p 007-249 to 007-251.

investment policies or business plans of its own.[931] KFL is a subsidiary of a Cayman Islands company (Augusta Cayman Limited) and was initially managed by Augusta Ventures Limited ("Old AVL") in terms of a March 2020 Consultancy Agreement.[932] The Augusta group of companies is scattered across the UK, Canada, Australia and Asia.[933]

872. In his first affidavit of October 2020, Mr Robert Hanna (on behalf of the Augusta group) commended Old AVL for being authorised and regulated by the UK's Financial Conduct Authority ("FCA").[934] Since then, AVL has been restructured, transferred to a new entity and was thereafter renamed "New AVL".[935]

873. Anglo pointed out that New AVL is not registered with the FCA, and is therefore not bound by the regulation Old AVL was subject to in its dealings with KFL.[936] Anglo noted with concern that the December 2020 Consultancy Agreement[937] that was subsequently concluded between New AVL and KFL removed all reference to the FCA regulatory scheme.[938] Mr Hanna admits this and seeks to argue that, despite his previous commendation of FCA registration, the absence of registration for New AVL does not matter.[939]

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[931] AA para 856.1.3 to 856.1.4 p 001-2983 and para 884 p 001-3003; Hanna affidavit para 9 p 001-9719.

[932] Amended Claim Funding Agreement clause C p 001-9810; Hanna affidavit para 16 p 001-2343.

[933] Hanna affidavit para 7 p 001-2341.

[934] Hanna affidavit para 14 p 001-2342.

[935] AA para 881 p 001-3001.

[936] AA paras 881.1 to 881.2 p 001-3002.

[937] Consultancy and Operational Support Agreement Annexure RHH2-1 p 001-2591.

[938] AA para 881.2 p 001-3002.

[939] Hanna affidavit paras 12 to 13 p 001-9720.

874. Mr Hanna, on AVL's behalf, touts AVL as a "professional funder".[940] Yet neither AVL nor KFL are in truth the "funders" of the litigation. The funds, which are channelled through KFL, are in turn channelled through two Luxembourg-based investment vehicles, Sherston S.à.r.l and Didmarton S.à.r.l ("the investment funds"), which in turn are managed by Bybrook Capital LLP "on behalf of institutional investors".[941] AVL is therefore no more than a consultant to KFL and KFL is admittedly only a shell to channel the funds.

875. Despite that, the misleading claim is made in the applicants' heads of argument that the applicants have made "full and detailed disclosure of the funding arrangements",[942] Mr Hanna does not identify the true funders, i.e. the "institutional investors*".* In the result, the real funders of the litigation remain unknown. On this basis alone, the funding scheme cannot be endorsed.[943]

The Court's oversight of the funding arrangements

876. How the proposed class action is funded is an important consideration in certification proceedings. The applicants accept this in setting out the principles established in *Children's Resource Centre* and *De Bruyn* in their heads of argument.[944] Aside from the considerations applicable to funding of class actions generally, there are several reasons why this particular funding scheme warrants

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[940] Hanna affidavit para 38 p 001-2346.

[941] Hanna affidavit para 30 p 001-23345.

[942] Applicants' HoA para 561 p 007-248.

[943] This notwithstanding, for the sake of convenience, we refer to the "funders" collectively in what follows as including KFL, AVL, the Augusta group, the investment funds and these unidentified "institutional investors".

[944] Applicants' HoA, paras 567 to 569 p 007-252.

heightened judicial oversight.

877. First, as stated by the Court in the judgment in the compelling application, the proposed class action is "exceptional", amongst others because the estimated costs and funding model is "a novelty in the South African landscape".[945] This novelty the Court described as exemplified by the following features:[946]

877.1. the primary legal representatives are the UK-based firm, Leigh Day;

877.2. all parties to the funding scheme (bar MM and counsel) are located outside of South Africa and are therefore not subject to the Court's jurisdiction; and

877.3. the third-party funder is not a foreign law firm but a for-profit third party funder.

878. The Court is not dealing with a third party funder that contracts directly with the litigant as in *National Potato Cooperative*.[947] It is not dealing with a foreign law firm acting as a funder as in *Gold Fields*[948] and *De Bruyn*.[949] What is proposed instead is a complex funding scheme funded through off-shore investors with deep pockets, located in tax havens with whom the litigants have themselves not

[945] Windell J judgment para 3 p 084-2.

[946] Windell J judgment para 3 p 084-3.

[947] *PriceWaterhouseCoopers Inc and Others v National Potato Co-operative Ltd and Another* [2015] 2 All SA 403 (SCA): the third-party funder was a foreign entity which entered into in a direct contractual relationship with the litigant it funded.

[948] In *Goldfields Ltd & Another v Harmony Gold Mining CO Ltd and Others* 2005 (2) SA 506 (SCA), the third-party funder was the law firm Motley Rice LLC which was acting as a consultant in the litigation similar to LD.

[949] In *De Bruyn v Steinhoff International Holdings NV and others* 2022 (1) SA 442 (GJ), the applicants for certification proposed to fund the litigation through the international law firm, DRRT, which had assigned part of its funding obligation to a third-party funder, Therium.

contracted directly.[950] The power dynamics at play must accordingly be differently conceived.

879. As observed in the minority opinion of Callinan and Heydon JJ in the Canadian case of *Fostif*:[951]

> "The purpose of court proceedings is not to provide a means for third parties to make money by creating, multiplying and stirring up disputes in which those third parties are not involved and which would not otherwise have flared into active controversy but for the efforts of the third parties, by instituting proceedings purportedly to resolve those disputes, by assuming near total control of their conduct, and by manipulating the procedures and orders of the court with the motive, not of resolving the disputes justly, but of making very large profits. Courts are designed to resolve a controversy between two parties who are before the court, dealing directly with each other and with the court: the resolution of a controversy between a party and a non-party is alien to this role. Further, public confidence in, and public perceptions of, the integrity of the legal system are damaged by litigation in which causes of action are treated merely as items to be dealt with commercially."[952]

880. A second reason why the funding requires heightened judicial scrutiny is that, while many other jurisdictions have legislated on these issues, both class actions and for-profit third-party litigation funding operate in a statutory vacuum in South Africa. This is despite the fact that permitting this type of funding has potentially significant implications for the domestic litigation market and access to justice.

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[950] AA para 933 p 001-3024.

[951] *Campbells Cash and Carry Pty Limited v Fostif Pty Limited* [2006] HCA 41.

[952] At para 266.

881. It is not only class action defendants who have concerns with the implications. In a publication in the South African Journal on Human Rights, J Brickhill said as follows:

> "There is a danger that South Africa may absorb some of the market-driven legal professional practices that accompany class action litigation in the US.
>
> …[T]he Constitution guarantees the right of access to courts in s 34, one element of which is civil legal aid if a 'fair hearing' is not possible without it. Relatedly, the Legal Practice Act 28 of 2014, which is the primary legislation governing the legal profession, recognises access to justice as a central statutory purpose. The state's duty, implemented through LASA, is to provide legal representation in class actions on behalf of poor people. Concomitantly, though for-profit representation must be permitted, the opportunities for private lawyers to profiteer from class actions should be restricted. As the American experience demonstrates, class actions are massively profitable for lawyers in private practice. South African private law does not award punitive damages, awarding only compensatory damages for delictual and other private law claims. Additionally, South Africa has a fairly strict regime for the recovery of legal costs. There are therefore limited opportunities in the South African legal system for the worst forms of profiteering. However, the possibility of profit-making from class actions still presents threats to the administration of justice."[953]

882. The consequence of permitting the excessively lucrative funding arrangements foreshadowed in the current case is to open the floodgates to foreign funders to burden South African courts with claims brought in South Africa solely because it permits of permissive favourable class action procedures, even where the link

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[953] J Brickhill (2021) A river of disease: Silicosis and the future of class actions in South Africa*, South African Journal on Human Rights*, 37:1, 31-58 p 24.

to South Africa is tenuous (as it is in this case).

883. In *Camps Bay Ratepayers*,[954] the Constitutional Court was concerned about the impact of increasing legal fees charged by the profession. It said that "in our country the legal profession owes a duty of diffidence in charging fees that goes beyond what the market can bear."[955] In the present case, Ms Mbuyisa has motivated the funding regime with reference to the fact that the local market cannot, in fact, bear the expense of this litigation.[956]

884. Brickhill argues that the concerns expressed by the Constitutional Court in *Camps Bay Ratepayers* apply with even greater force to class actions, because the resistance to mounting expenses ordinarily expected from losing defendants and from plaintiffs themselves is diminished in class actions.[957] Brickhill therefore argues that certifying courts should closely scrutinise fees sought to be recovered and the rates at which foreign lawyers may charge fees recoverable as disbursements should be based on South African standards.[958]

885. Third, these funding arrangements incentivise a foreign, solicitation-driven litigation industry that imposes significant costs and constraints on the South African court system, of which this case is a harbinger.[959]

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[954] *Camps Bay Ratepayers and Residents Association and Another v Harrison and Another* [2012] ZACC 17; 2012 (11) BCLR 1143 (CC).

[955] *Camps Bay Ratepayers and Residents Association and Another v Harrison and Another* [2012] ZACC 17; 2012 (11) BCLR 1143 (CC) at para 11.

[956] FA para 304 p 001-134.

[957] J Brickhill (2021) A river of disease: Silicosis and the future of class actions in South Africa, *South African Journal on Human Rights*, 37:1, 31-58 p 26.

[958] J Brickhill (2021) A river of disease: Silicosis and the future of class actions in South Africa, *South African Journal on Human Rights*, 37:1, 31-58 p 26.

[959] AA para 933 p 001-3024.

886. In *National Potato Co-operative*, the SCA observed that it was the litigation funder – disconnected from both the claim and South Africa – who stood to gain predominantly from the outcome of a case that imposed significant burdens on the South African legal system.[960] The SCA held that it was "debatable whether that is a desirable state of affairs" considering the significant social costs implicated in the use of litigation for the settlement of disputes in society.[961] The SCA held:

> "It is undesirable that outsiders driven purely by commercial motives should be able to take over these disputes for their own benefit. When that occurs it is difficult to see how the constitutional guarantee of access to courts is engaged. It may perhaps be necessary at some future date to consider the precise ambit of our earlier decision in this regard and to what extent it permits a departure from the previous law in relation to champerty."[962]

887. A fourth consideration is that the proposed class will comprise in the main of children, a fact which this Court held necessitated a heightened duty of scrutiny with respect to the proposed funding arrangement.[963]

888. For these reasons, the Court's concern with, and heightened scrutiny of, the proposed funding arrangements is central to the interests of justice.

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[960] *PriceWaterhouseCoopers Inc and Others v National Potato Co-operative Ltd and Another* [2015] 2 All SA 403 (SCA) at para 12.

[961] *PriceWaterhouseCoopers Inc and Others v National Potato Co-operative Ltd and Another* [2015] 2 All SA 403 (SCA) at para 12.

[962] *PriceWaterhouseCoopers Inc and Others v National Potato Co-operative Ltd and Another* [2015] 2 All SA 403 (SCA) at para 12.

[963] Windell J judgment para 19 p 084-11.

The funders' return is excessive

889. A court should not certify a class action in which the funders will be over-compensated.[964] The Court may also "stipulate that a particular reward is [or is not], *ex ante*, a reasonable return for the risk assumed by the funder".[965]

890. Anglo submits that the funders' return is excessive. The funders stand to make a fortune if the class action is certified and the proposed classes achieve even a relatively modest judgment or settlement against Anglo.[966]

891. In exchange for the litigation funding, KFL will take 25% of the applicants' total settlement or award.[967] The applicants' heads of argument focus on why this 25% is reasonable as if it is all that the funders will take home. That is misleading. In addition to 25% of any award, KFL is entitled to 100% of the budgeted costs and disbursements that may be recovered from Anglo on the classes' behalf.[968] Even if the funding is terminated, the funders retain an entitlement to 200% of the deployed funding in the event that the class goes on to achieve a successful outcome.[969]

892. Anglo has demonstrated the excessiveness of the return by projecting the likely return if even a modest settlement or judgment were obtained for class members of R21,000 each. Even on such a modest assumption, the funders are likely to

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[964] *De Bruyn v Steinhoff International Holdings NV and others* 2022 (1) SA 442 (GJ) at para 82.

[965] *De Bruyn v Steinhoff International Holdings NV and others 2022* (1) SA 442 (GJ) at para 94.

[966] AA para 830 p 001-2973.

[967] RA para 37 p 001-9727; Contingency Fee Agreement clause T p 001-8983.

[968] Contingency Fee Agreement clause T p 001-8983.

[969] Amended Claim Funding Agreement clause 12.7 p 001-9827.

receive more than R525 million as well as taxed costs.[970] That is more than a three-fold return on their investment.[971]

893. Considering the payment waterfall anticipated in the funding agreements, the Augusta group – which has invested none of its own funds in the litigation – stands to receive about R157.5 million based on the above assumptions.[972] Of course, if more generous assumptions are made about a potential award to the classes, the funders' returns skyrocket.[973] The applicants do not dispute Anglo's illustrative projections on the funders' return.[974]

894. Mr Mbuyisa (of MM) and Mr Hanna (of the Augusta group) deny that the return is excessive in vague and general terms. Mr Hanna makes generalised appeals to the funders' risks, uncertainty around the ultimate quantum in the case if successful, and the time value of money.[975] He argues, in reference to developed nations such as the United Kingdom and Australia that their expected return is "*typical*" of third-party funding in those markets.[976]

895. These deponents do not provide any reason why a 25% return is required, nor 200% of their investment. The applicants themselves – as class representatives – have not deposed to any affidavit in defence of the funders' return. This omission is remarkable and telling.

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[970] AA para 832 p 001-2973.

[971] AA para 832 p 001-2974.

[972] AA para 833 p 001-2974.

[973] AA para 833 p 001-2974.

[974] RA para 629.1 p 001-7804; Hanna affidavit para 38 p 001-9727.

[975] Hanna affidavit paras 38 to 39 p 001-9727.

[976] Hanna affidavit paras 40 to 45 p 001-9727.

896. As referenced above in relation to *Camps Bay Ratepayers*[977] – in assessing the *ex ante* reasonableness of the funders' return, this Court's concern is with the South African market and South African legal practice. Commercial considerations of the typical profit for commercial third-party funders in Australia and the United Kingdom are hardly relevant. For a foreign, third party to extract over half a billion rand if the class were to receive only a modest award of R21 000 per member is surely excessive in the South African context.

897. Further to this, the funders' return is *ex ante* unreasonable in light of the Contingency Fees Act.

    897.1. The applicants argue that, because the Contingency Fees Act does not specifically limit the permissible return that a third-party funder may recover, there is no legal basis to say that the recovery of 25% plus costs is excessive.[978] By this, it would appear, that the funding scheme is intended to bypass the Act.

    897.2. While the Contingency Fees Act does not apply to commercial third-party litigation funders, for similar public policy reasons, litigation funders in class actions ought to be held (at the very least) to the safeguards in that Act. It would in any event offend the spirit and purpose of the

[977] *Camps Bay Ratepayers and Residents Association and Another v Harrison and Another* 2012 (11) BCLR 1143 (CC) at para 11.

[978] RA para 463 p 007-7749.

Contingency Fees Act to allow the applicants' legal representatives to adopt a scheme that avoids the Act's application.[979]

898. In their heads of argument, the applicants pivot to claim that the 25% return for the funders "is consistent with the cap placed on the contingency fee arrangements under the Contingency Fees Act."[980] Again, this is misleading.

899. The Contingency Fees Act limits the maximum amount that legal practitioners may recover from their clients when charging a success fee to 200% of the legal practitioner's normal fees or 25% of the "total amount awarded" to the client, whichever is the least.[981] The Act stipulates that for the purpose of calculating the "total amount awarded" to the client, that total amount shall not include any costs.[982]

900. Rule 6.6[983] clarifies that a contingency fee agreement may not provide for party and party costs to be retained in addition to a success fee. The litigant should retain any costs that are recovered, from which amount the legal representative may recover disbursements only.[984]

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[979] See Rule 6.10 of the Rules Made in Terms of Section 6 of the Contingency Fees Act 66 of 1997, Gazette No 42739, 4 October 2019.

[980] Applicants' HoA para 604 p 007-264.

[981] Section 2(2).

[982] Section 2(2).

[983] Rules Made in Terms of Section 6 of the Contingency Fees Act 66 of 1997, Gazette No 42739, 4 October 2019

[984] See *Mofokeng v Road Accident Fund, Makhuvele v Road Accident Fund, Mokatse v Road Accident Fund, Komme v Road Accident Fund* [2012] ZAGPJHC 150 para 49 to 50, where the Court held that section 2(2) of the Contingency Fees Act does not allow a legal practitioner to claim the taxed party-and-party costs to be paid by the other side, over and above the already generous fee allowed under the section: "The attorney may recover from party and party costs, once he or she has recovered the full attorney and client fees, only the reimbursement of his out-of-pocket expenses and not fees."

901. The proposed funding arrangements are not, however, disciplined by these strictures.

901.1. Because of the scale of the proposed class, 25% of the final award or settlement may well exceed 200% of the legal fees charged by many multiples. The class members therefore do not enjoy the protection under the Contingency Fees Act of the lesser of the two amounts, but are locked into a 25% loss of their settlement.

901.2. The 25% is also not a "cap" on the fees that may be recovered from the class as the Contingency Fees Act envisages – it is frozen as a determined return. There is, in the result, no prospect for a scaling effect, i.e. that the percentage of the return will be correlated with the actual hours in legal services provided or the size of the final award.

901.3. Moreover, unlike what is required under the Contingency Fees Act, the client (i.e. the class members) will not retain the recovered costs – all of these recovered costs will be paid to KFL in addition to KFL's 25%. Any "unbudgeted costs" must go to MM (which is also impermissible under the Contingency Fees Act).[985]

902. Mr Hanna defends the funders' return by arguing that, in the UK it would not be unusual for him to recover 330% of the deployed capital from litigation.[986] But our law envisages different limits. In situations where the "funder" under the Contingency Fees Act is the attorney, their risk is 100% of their fees. For public

[985] Contingency Fee Agreement clauses T to U p 001-8982.

[986] Hanna affidavit para 41 p 001-9728.

policy reasons, the most our law considers to be appropriate as a reward for a litigation funder's risk is a 200% return on the investment.

903. In this case, the funder's excessive recovery does not only apply upon success. The Contingency Fee Agreement provides for upside for the funders even if the arrangements terminate early. If the Agreement is terminated, "the Funder shall remain entitled to a share of any damages which the Client recovers in an amount of 200% of the sums paid by the Funder towards costs and disbursements at the date of termination."[987]

904. It is correct that in *De Bruyn* the Court said that there were no reasons why a 25% cap was not a reasonable ceiling to the success fee for the attorneys in the circumstances.[988] Notably, however, the reasonableness of the return was not in issue in that case, and the Court's assessment was therefore *obiter*.[989]

905. In contrast, the excessiveness of the funders' return in this case has explicitly been raised by Anglo.[990] The scale of the claim contemplated in these proceedings and the funder's retention of 100% of recovered costs are further distinguishing features of this case. In any event, the remark was also *obiter,* because the case was not determined on this basis.

906. The excessiveness of the funders' anticipated return – and its implications for the South African legal market and access to justice – do not support the interests

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[987] Contingency Fee Agreement clause 26 p 001-8990.

[988] *De Bruyn v Steinhoff International Holdings NV and others* 2022 (1) SA 442 (GJ) at para 88.

[989] *De Bruyn v Steinhoff International Holdings NV and others* 2022 (1) SA 442 (GJ) at para 88.

[990] AA para 834 p 001-2974.

of justice for certification in this case. In the very least, the funder's return should be subject to the same strictures set out in the Contingency Fees Act to be *ex ante* reasonable. That is to say, the funders should not be permitted to claim the recovered costs, and their return should be limited to whichever is the lesser of 25% of the award or 200% of their investment in the litigation, subject to the trial court's final oversight.

The agreements remain non-compliant with the Contingency Fees Act

907. In its answering affidavit, Anglo raised the fact that the Client Funding Agreement was fatally defective for being non-compliant with the Contingency Fees Act in several respects. In the compelling application, the applicants accused Anglo of being "reckless" and "offensive" in suggesting that the funding arrangements ought to comply with the Contingency Fees Act and that they contravened the Act.[991]

908. In their replying affidavit, the applicants reversed course. Ms Mbuyisa now accepts that the Client Funding Agreement is subject to the Contingency Fees Act.[992] MM have therefore amended the class representatives' Client Funding Agreement in an attempt to make it compliant with the Act. They have similarly amended the Class Member Retainer.[993]

909. Despite having concluded a contingency fee agreement which Ms Mbuyisa belatedly admits was non-compliant with the Contingency Fees Act, she persists

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[991] AA in compelling application para 52 p 003-291.

[992] RA para 470 p 001-7751.

[993] Albeit that only 196 of the 1 056 proposed "class members who signed the first version" have signed the amended Class Member Retainer (RA para 471 p 001-7751).

in the contention that those errors did not render the initial agreements "fatally defective".[994] This is incorrect in law. Any contingency fee agreement that does not comply with the Contingency Fees Act is a nullity.[995]

910. The applicants' new Contingency Fee Agreement has addressed several concerns that Anglo raised in relation to the Client Funding Agreement. But three fundamental problems remain.

911. The first problem is that the applicants' legal representatives cannot retrospectively remedy their non-compliance with the Act in the way that they have done in their replying papers. As held in *Tjatji*, there are textual indications that a contingency fee agreement must be entered into sufficiently early in the proceedings to enable compliance with the Act.[996] Legal practitioners may not act on contingency until and unless they have signed a valid agreement in terms of the Act.[997]

912. The Court in *Tjatji* held further that even if the new agreements belatedly concluded fulfil the requirements of the Act on their face, they are invalid by virtue of the parties' initial non-compliance with the Act:

> "On the face of it, the new contingency fee agreements appear to be valid as the prescribed form of agreement has been used. In substance, however, they are invalid as a result of the failure by the parties to observe the requirements of the Act. Although the new contingency fee agreements

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[994] RA p 001-7751.

[995] *Tjatji v Road Accident Fund* 2013 (2) SA 632 (GSJ) para 21; *PriceWaterhouseCoopers Inc and Others v National Potato Cooperative Ltd* 2004 (6) SA 66 (SCA) at para 41.

[996] *Tjatji v Road Accident Fund* 2013 (2) SA 632 (GSJ) at para 15.

[997] *Tjatji v Road Accident Fund* 2013 (2) SA 632 (GSJ) at paras 18 – 19.

are formally in order, they are substantially invalid (see *Headermans (Vryburg) (Pty) Ltd v Ping Bai* 1997 (3) SA 1004 at 1010D-H, and cases there cited.

There is also an additional and different reason why, in my view, the new contingency fee agreements are invalid. In each of the cases under consideration, the intention in entering into the new contingency fee agreement was to retrospectively validate the contingency fee agreements that were entered into in violation of the Act. This cannot be done. It is trite that an agreement which is a nullity cannot be rectified so as to become a valid contract."[998]

913. The second problem is that the applicants' primary legal representatives, LD, are not parties to the Client Funding Agreement or the Contingency Fees Agreement. This indicates that the Agreements do not represent an accurate state of affairs to the classes. Moreover, the Court which is asked to sanction the contingency arrangements is asked to do so in respect of legal representatives who are neither party to the Agreements nor in the Court's jurisdiction.

914. The third problem is that the Contingency Fee Agreement is internally incoherent and contradictory. As held in *Tjatji*, "The client must also have a proper understanding of the financial implications of the agreement."[999] In its current form, the financial implications for the client are incoherent:

914.1. The Contingency Fee Agreement defines "Deferred Counsel's Fees" as the 38% of their fees which the funder is liable to pay counsel if the class

[998] *Tjatji v Road Accident Fund* 2013 (2) SA 632 (GSJ) at para 24 to 35.

[999] *Tjatji v Road Accident Fund 2013* (2) SA 632 (GSJ) at para 19.

action is successful or partially successful.[1000] Clause 20 of the Contingency Fee Agreement says that *"the Funder shall pay the share of Deferred Counsel's Fees as aforesaid".*

914.2. However, it then contradicts itself: "The Client shall only be liable for the payment of Deferred Counsel's Fees in the event of the Client being successful or partially successful". The Agreement purports to render both the funders and the class members liable for Deferred Counsel's Fees in the event of success.

914.3. The Contingency Fee Agreement is also inconsistent with its annexures. The Agreement states that the fees and disbursements are "more specifically set out and detailed in the attached Terms of Business".[1001] The Contingency Fee Agreement states further that the Terms of Business "form an integral part of this Contract."[1002]

914.4. While Clause 34 of the Contingency Fee Agreement provides that the Contingency Fees Act and Agreement take precedence in the event of conflict with the Terms of Business, the extent of the conflict, set out below, leaves the Contingency Fee Agreement without a clear meaning.

914.5. For example, the Terms of Business say that the client (i.e. the class representative) is liable for MM's fees and disbursements, that MM can increase their fees by 10% annually, and that the client must maintain a

[1000] Contingency Fee Agreement clause 4 p 001-8984.

[1001] Contingency Fee Agreement clause 14 p 001-9045.

[1002] Contingency Fees Agreement clause 34 p 001-9050.

minimum trust balance at all times.[1003] In contrast, the Contingency Fee Agreement at least implies that the class representatives and members will not be liable to pay any monies to MM or maintain MM's trust balance. The Contingency Fee Agreement further sets the fees that will be charged by MM, LD and counsel with no indication of annual increases or interest to be levied.[1004]

914.6. The Contingency Fee Agreement further says that hourly fees are chargeable "at the lowest end" of MM paralegals at R1,500 per hour and partners at R2,500 per hour.[1005] In contrast, the Terms of Business say professional fees range from R1,270 to R2,500.[1006] It may be that the Terms of Business are simply the standard terms and conditions at which MM offers its services and, accordingly the Terms of Business have not been adjusted to take the Contingency Fee Agreement into account, the latter of which is binding.

914.7. But if this is so, it contradicts what Ms Mbuyisa says in her replying affidavit that MM's rates for the class action "are in fact reduced rates compared with what we would normally charge in other cases".[1007] If anything, the Terms of Business demonstrate that MM are offering their services to the class at slightly higher rates than their usual fees.

[1003] Terms of Business clauses 5.2 to 5.7 p 001-9059.

[1004] Contingency Fee Agreement clauses O to Q p 001-8981.

[1005] Contingency Fee Agreement clause O p 001-8981.

[1006] Terms of Business clause 5.4 p 001-9027.

[1007] RA para 470 p 001-7751.

915. For these reasons we submit that the Contingency Fee Agreement is unlawful. Its illegality taints the proposed funding arrangements and, in the result, the suitability of the class representatives. For the reasons set out in *Tjatji,*[1008] the illegality cannot be cured by further amendments to the Agreement. The proposed class action cannot be certified on this basis.

The funding is insufficient

916. To certify a class action, the Court *"*must be satisfied as to the financial ability of the representative plaintiff to bear the expense that is necessarily involved for the proper prosecution of the class action".[1009] Anglo is concerned that the level of funding is inadequate compared with the magnitude of the claim and its expected timeframe.[1010]

917. Ms Mbuyisa in the founding affidavit estimated the total costs to trial to be approximately R78 million.[1011] In his affidavit dated 13 October 2020, Mr Hanna said that the Augusta group was "confident" that the initial facility of £4,5 million "will be sufficient to finance the case to trial".[1012] Despite the confidence expressed in his October 2020 affidavit, a significant increase had to be sought in the funding at this very early stage of proceedings – a mere three months later, in January 2021.[1013] The Court can place little stock in Mr Hanna's confidence in

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[1008] *Tjatji v Road Accident Fund* 2013 (2) SA 632 (GSJ).

[1009] *Fehringer v Sun Media Corp*, (2002), 27 CPC (5th) (SCJ) at para 35.

[1010] AA p 001-2974.

[1011] FA para 304 p 001-134.

[1012] Hanna affidavit para 25 p 001-2344.

[1013] RA para 466 p 001-7750; Hanna affidavit para 48 p 001-9729.

the sufficiency of the funding in these circumstances.

918. Mr Hanna suggests instead that the Court should be reassured by the prospect that KFL has the sole discretion to approve cost overruns in the future if this makes commercial sense for KFL.[1014] With respect, this Court cannot rely on the mere possibility that a for-profit funder might in the future find it to be commercially expedient to invest more in the trial. In any event, it is the investment funds – not KFL or AVL – which have absolute discretion ultimately to approve increases to the funding.[1015] Mr Hanna has no control over that.

919. The only guaranteed funding is an amount of £5.2 million[1016] (roughly R115 million),[1017] which will only be available until March 2024.[1018] It is highly unlikely that a trial of this complexity and scale would be concluded by then.[1019] In fact, this certification application will only be heard in January 2023. It is that guaranteed amount within that period on which the Court must rely to decide on the sufficiency of the applicants' funding.

920. In the replying affidavit, Ms Mbuyisa says that one of the reasons that the funding has had to be increased is because of "*Anglo's approach to the litigation*", by, amongst others, seeking disclosures from the applicants in terms of the Rules of Court and in filing a comprehensive answering affidavit.[1020] The inference

[1014] Hanna affidavit para 48 p 001-9729.

[1015] Amended Senior Credit Facility Agreement clause 2.5 p 001-9848.

[1016] Amended Claim Funding Agreement p 001-9812 as read with RA para 48 p 001-9729.

[1017] P 001-9023.

[1018] Hanna affidavit para 49 p 001-9729.

[1019] AA para 937 p 001-3025.

[1020] RA para 466 p 001-7750.

underlying Ms Mbuyisa's complaint is that the applicants have sufficient funds to litigate the class action on its current budget as long as Anglo ties its hands behind its back, does not seriously contest the case, nor exercise its rights in terms of the law and Rules of Court. In their heads of argument, the applicants make the remarkable admission that the funders had in fact not budgeted for the prospect of any interlocutory applications.[1021]

921. If the litigation funding is ultimately insufficient, Anglo will be further prejudiced in having no recourse for its costs. This is because the ATE Insurance Policy states that if the class action is abandoned, discontinued, stayed or dismissed as a result of KFL or the class representatives having insufficient funds, the insurer's liability for costs is excluded.[1022]

922. Taken together, the applicants have failed to prove the sufficiency of their funding. The risk, should their funding be insufficient, is to prejudice the claims of hundreds of thousands of class members, to waste the Court's resources, and to drag Anglo through litigation which is ultimately not sustainable and without prospect of recovering its costs. This is not in the interests of justice.

923. The applicants attempt in their heads of argument to cast the onus on Anglo to give a figure for what the applicants' budget should be, but this is misconceived. It is the applicants who have an onus to prove the sufficiency of their funding. They have failed to do so.

[1021] Applicants' HoA para 608 p 007-266.

[1022] ATE Insurance Policy clause 4.15 p 001-2404.

The ATE insurance policy is inadequate

924. In *De Bruyn*, the Court held that while security for costs is not a requirement for certification, the certification respondent's interests in this regard warrant consideration in scrutinising the funding arrangements.[1023] Whether or not an adverse costs order in favour of Anglo is likely to be honoured is thus relevant to certification.[1024]

925. KFL took out limited After-the-Event Insurance ("ATE Insurance") with International General Insurance Co (UK) Ltd.[1025] After Anglo pointed out several concerns in the redacted policy schedule disclosed by KFL, an amended redacted policy schedule was disclosed in the replying papers.[1026] The indemnity against adverse costs is limited to £2 million.[1027] Even at such a low limit, Mr Hanna claims the insurance will "ensure the class members will not be required to make any payment in respect of adverse costs."[1028] Despite Mr Hanna's statement, there is no undertaking by KFL (or its funders) in any of the funding agreements that they commit to meet the claimants' adverse costs that may exceed the insurance coverage.

926. Anglo contends that the coverage is insufficient. The costs award (in the event that the classes are successful) is likely to be "*significantly more than*

[1023] *De Bruyn v Steinhoff International Holdings NV and others* 2022 (1) SA 442 (GJ) at para 109.

[1024] *De Bruyn v Steinhoff International Holdings NV and others* 2022 (1) SA 442 (GJ) at para 109.

[1025] Annexure RHH6 p 001-2392; Hanna affidavit para 35 p 001-2346.

[1026] Annexure RHH3-5 p 001-9867.

[1027] Annexure RHH3-5 p 001-9867.

[1028] Hanna affidavit para 35 p 001-2346.

£2 million".[1029] The ATE Policy also explicitly excludes the insurer's liability for "*any element of recoverable VAT*".[1030]

927. Further to the insufficiency of the indemnity, there are several restrictions in the ATE insurance policy – in the context of this case – that demonstrate that a favourable costs award for Anglo is unlikely to be honoured.[1031]

928. The decision of the Federal Court of Austria in *Petersen*[1032] is instructive in this regard. There, the Court held that ATE insurance taken out by a litigation funder ("Vannin") on behalf of the litigant ("Petersen") provided insufficient security for the respondents' costs. While this Court is not considering an application for security for costs, the Federal Court's reasoning on the insufficiency of the ATE insurance is instructive, particularly considering its novelty in the South African context. The Court in *De Bruyn* recognised that the *Petersen* decision was "of some interest" in this regard.[1033]

929. The Court in *Petersen* was not persuaded that the ATE insurance policy provided sufficient security for respondents' costs based on a number of considerations considered cumulatively.[1034] These included the absence of any evidence that the litigant, Petersen, had any financial resources other than the ATE policy to meet a potential costs order.[1035] Unlike in this case, however,

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[1029] AA para 896 p 001-3010.

[1030] ATE Insurance Policy clause 4.14 p 001-2405 .

[1031] *De Bruyn v Steinhoff International Holdings NV and others* 2022 (1) SA 442 (GJ) at para 109.

[1032] *Petersen Superannuation Fund Pty Ltd v Bank of Queensland Ltd* [2017] FCA 699.

[1033] *De Bruyn v Steinhoff International Holdings NV and others* 2022 (1) SA 442 (GJ) at para 109.

[1034] *Petersen Superannuation Fund Pty Ltd v Bank of Queensland Ltd* [2017] FCA 699 at para 107.

[1035] *Petersen Superannuation Fund Pty Ltd v Bank of Queensland Ltd* [2017] FCA 699 at para 25.

Petersen was by all indications a resident of the jurisdiction in which the case was determined.

930. The Federal Court was also concerned that the funder's financial position was largely unknown and that there was no evidence that it had any assets in Australia.[1036] Similarly, in this case, there has been no disclosure of KFL or AVL's financial status. It appears, however, that KFL has no assets other than the committed funds considering that it was established "for the single purpose of channelling the finance for these proceedings".[1037] The "institutional investors" behind it are not even identified. The only information provided is a letter (not under oath) from an administrator of the investment funds stating the funds' assets.[1038] There is no indication that any of those assets are in South Africa. In any event, the investment funds are not a contracting party to the Claim Funding Agreement or an insured party under the ATE policy. Any disclosure of their assets is cold comfort to Anglo.

931. The Court in *Petersen* was also concerned with the poor prospects of the respondents being able to enforce the insurance policy for a number of reasons. Just as is the case here, the respondents in *Petersen* were not the insured party under the policy.[1039] Petersen had in that case made undertakings under oath to make claims on the policy to meet an adverse costs order, to do so expeditiously, and to pay to the respondents any amounts paid to him by the insurer. Notwithstanding those undertakings, the Federal Court held that there was no

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[1036] *Petersen Superannuation Fund Pty Ltd v Bank of Queensland Ltd* [2017] FCA 699 at para 26.

[1037] Hanna affidavit para 9 p 001-9717.

[1038] Annexure RHH5 p 001-2390.

[1039] *Petersen Superannuation Fund Pty Ltd v Bank of Queensland Ltd* [2017] FCA 699 at para 108.

undertaking by Petersen to sue the UK-based insurer to enforce a legitimate claim, and there was no mechanism for the respondents to compel Petersen to do so.[1040] The Court considered further that the respondents had no contractual rights against Petersen, despite his undertakings to the Court. The funder had also itself not offered to provide security other than paying the premium for the insurance.[1041]

932. Anglo is significantly worse off than the respondents in the *Petersen* case. Anglo has no contractual rights under the ATE policy, it has no protection of domestic legislation allowing it to sue a third-party funder's insurer, it has no benefit of the insurer's submission to the South African courts, nor does it have any undertaking from the funders to facilitate the registration of a judgment in the United Kingdom against the insurer should it be necessary. There are no undertakings to the Court by the applicants or KFL to sue the insurer for a reasonable claim, least of all contractual obligations to do so. Moreover, the terms of KFL's ATE policy states that "a person which is not a party to this contract has no right under the Contracts (Rights of Third Parties) Act 1999 to enforce any term of this contract but this does not affect any right or remedy of a third party which exists or is available other than by virtue of this Act".[1042] Anglo will not be able to enforce payment of a costs order in its favour against KFL on the strength of the insurance policy.[1043]

933. The Federal Court in *Petersen* considered, moreover, that the insurance policy

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[1040] *Petersen Superannuation Fund Pty Ltd v Bank of Queensland Ltd* [2017] FCA 699 at para 108.

[1041] *Petersen Superannuation Fund Pty Ltd v Bank of Queensland Ltd* [2017] FCA 699 at para 109.

[1042] ATE Insurance Policy clause 11.1 p 001-2412.

[1043] AA para 894.10 p 001-3010.

entitled the insurer to exclude liability or cancel the policy on the basis of fraudulent non-disclosure by the insured. Without knowing what was disclosed to the insurer, the Court was concerned that neither the respondents nor the Court could reliably conclude that the coverage was secure.[1044]

934. In this case, KFL's ATE policy requires that the insured party similarly has an obligation to provide to the insurer a fair presentation of its risk in its proposal for insurance and in any other written communication.[1045] The insurer's liability is excluded if the insured party defaults in this regard.[1046] The insurer may also avoid the contract even if the breach of this obligation was not reckless or deliberate.[1047]

935. As in the *Petersen* case, Anglo does not know what KFL may or may not have disclosed to the insurer. However, the terms of the policy itself reveal certain concerns. In the initial version of the policy, LD was indicated as KFL's legal representative without any mention of MM.[1048] The policy was also drafted in a manner that assumed that KFL was the litigant in the class action.

936. Anglo raised the fact that either KFL had failed to make a fair presentation of the case to the insurer in these respects or the claims before this Court that MM has control of the litigation under the classes' instruction are incorrect.[1049] KFL acknowledged the legitimacy of this problem by amending the terms of the policy.

[1044] *Petersen Superannuation Fund Pty Ltd v Bank of Queensland Ltd* [2017] FCA 699 at para 114.

[1045] ATE Insurance Policy clause 1 p 001-2404 and clause 19 p 001-2415.

[1046] ATE Insurance Policy clause 4.2 p 001-2404.

[1047] ATE Insurance Policy clause 19.2 p 001-2416.

[1048] ATE Insurance Policy Annexure RHH6 p 001-2392.

[1049] AA para 901 p 001-3012.

MM is now indicated as the legal representative and the insured parties include the class representatives.[1050] Mr Hanna explains this change by saying: "The ATE policy was arranged by brokers, not by KFL or Augusta, and this was not picked up".[1051] If anything, this explanation only strengthens the concern that not even KFL knows whether a fair representation of the case was made to the insurer.

937. The insurance policy in the *Petersen* case further entitled the insurer to exclude liability under certain conditions over which the respondents had no control, including if Petersen's legal representatives acted negligently. The respondents argued that they were likely at trial to contest the claim vigorously and to criticise how the case was pleaded and conceptualised. This implied that the respondents' defence of the claim would in turn expose them to the risk of the policy being cancelled by exposing evidence of the legal representatives' negligence.[1052] The Court held that –

> "the respondents should not be inhibited in the way they seek to present their respective defences by the jeopardy that, in doing so, they might also be undermining the only means by which they can recover their costs if they succeed in those defences.
>
> In any event, the conduct of complex commercial litigation almost inevitably throws up difficult forensic and tactical challenges for the parties, which require decisions to be made along the way. These decisions may be made negligently, even if made in good faith.

[1050] ATE Insurance Policy Schedule p 001-9867.

[1051] Hanna affidavit para 24 p 001-9724.

[1052] *Petersen Superannuation Fund Pty Ltd v Bank of Queensland Ltd* [2017] FCA 699 at para 121.

> … Why should parties in the position of the respondents bear the risk of how Petersen chooses to bring and conduct its own case?"[1053]

938. The ATE insurance policy in this case explicitly excludes the insurer's liability in several instances, including if the class representatives fail to follow MM's legal advice,[1054] any unreasonable delay or default by MM,[1055] and any failure by MM to comply with a "*pre-action protocol*" (a term that is undefined).[1056] The insured also have significant duties under the insurance policy in respect of the conduct of the litigation. These include to instruct the legal representative to conduct the case reasonably.[1057] Taken together, these clauses demonstrate that Anglo too faces the jeopardy described in *Petersen*.

939. When one considers these factors together, as the Federal Court did in *Petersen*, one is left with little confidence that a costs order in Anglo's favour is likely to be honoured. This reflects poorly on the suitability of the class representatives and poses the risk of significant prejudice to Anglo.

The class representatives are not positioned to sufficiently control the litigation

940. In *De Bruyn*, the Court stated that the class representative must be able to give instructions and exercise control over the litigation in the best interests of class members.[1058] The nature of a funders' influence over the litigation is also a

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[1053] *Petersen Superannuation Fund Pty Ltd v Bank of Queensland Ltd* [2017] FCA 699 at paras 121 to122.

[1054] ATE Insurance Policy clause 4.1 p 001-2404.

[1055] ATE Insurance Policy clause 4.2 p 001-2404.

[1056] ATE Insurance Policy clause 4.4 p 001-2405.

[1057] ATE Insurance Policy clause 5.5.3(a) p 001-2406.

[1058] *De Bruyn v Steinhoff International Holdings NV and others* 2022 (1) SA 442 (GJ) at para 82.

common tool to assess whether champertous agreements are contrary to public policy in countries which apply English common law.[1059]

941. Anglo has raised three, inter-related concerns in this regard: first, that the funders have inappropriate levels of control over the litigation; second, that the lawyers are indicated as controlling the case, not the class; and third, that in this context the class representatives and members are disempowered.

942. While Ms Mbuyisa and Mr Hanna scoff at Anglo's concerns,[1060] we reiterate that the fact of class control over the litigation should not be measured by the subjective views of the parties who aim to profit from the arrangement. It is also not a question of Ms Mbuyisa or Mr Hanna's personal credibility or good standing.

943. As in the Canadian case of *Houle*[1061] (which was cited with approval in *De Bruyn*)[1062] the Ontario Superior Court of Justice expressed concern that the actual provisions of the agreements belied the funder's assurances that the claimant had autonomy and control over the litigation. Similarly, Anglo relies on the content of the funding agreements and the facts of the case, which objectively determine where the real control lies.[1063] While on the surface, the agreements recite that "Neither the Funder nor Leigh Day will exercise control over the Case,

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[1059] See, for example, *Murphy & Others v Gladstone Ports Corporation Ltd* [2019] QSC 12 at para 28.

[1060] See, for example, AA para 480 p 001-7756, and Hanna affidavit para 32 p 001-9725.

[1061] *Houle v St Jude Medical Inc* 2018 ONSC 6352, available at: http://canlii.ca/t/hvq7d.

[1062] *De Bruyn v Steinhoff International Holdings NV and others* 2022 (1) SA 442 (GJ) para 82.

[1063] AA para 843 p 001-2978.

which will be conducted by MM",[1064] their operative provisions indicate otherwise.

The funding arrangements afford the funders inordinate control

944. Anglo's first concern is that the funding arrangements afford the funders inordinate control over the litigation.[1065] It says so for five reasons.

945. First, under the applicants' proposed funding arrangements, the matter cannot realistically be settled without the funders' and insurer's consent.

945.1. If Anglo makes a settlement offer, MM has an equal duty to consult with LD and KFL as it does with the class representatives.[1066]

945.2. Under the Claim Funding Agreement between MM, LD and KFL, MM has agreed that it is contractually "obliged to … make or accept any Reasonable [settlement] Offer on the Class Member's behalf".[1067] MM is duty-bound to accept or make offers which counsel – not the class members or class representatives – consider to be reasonable.[1068] If MM fails to abide by this obligation, KFL is entitled to suspend the funding.[1069] MM may effectively only make an offer of settlement in consultation with LD and if counsel agrees to it in writing.

945.3. A majority of the class representatives, MM, LD, and KFL have equal

[1064] Amended Claim Funding Agreement clause E p 001-9810.

[1065] AA para 841 CL001-2976.

[1066] Amended Claim Funding Agreement para 10.3.1 p 001-9824.

[1067] Amended Claim Funding Agreement clause 10.5.1 p 001-9824.

[1068] AA p 001-3017.

[1069] Amended Claim Funding Agreement clause 12.1.4 p 001-9826.

rights in respect of how disputes on settlement is handled. A class representative may only refer a dispute if a majority of the class representatives agree. A dispute on settlement is determined by an independent senior counsel giving an opinion on the reasonableness or otherwise of the settlement.[1070]

945.4. The ATE insurance policy requires that insured parties (initially only KFL, and since amended to include the class representatives) cannot make or reject a settlement without the insurer's approval.[1071] The insured parties may not continue their action without threat of losing their ATE insurance if the insurer forms the view that they are likely to lose.[1072] While these provisions may make commercial sense from the insurer's perspective, they have implications for the freedom of the class representatives to act in the classes' best interests, being restricted in these ways in freely choosing to settle or continue with the litigation at any given time.

946. Second, in *Houle*, a significant aspect of the Court's concern was that the funder retained the right to terminate the agreement in their sole discretion and in the absence of any breach by the claimant.[1073] Likewise, the funders have significant discretion to terminate the funding agreements in this case. These include the following arrangements, amongst others highlighted in Anglo's answering

[1070] AA para 917.6 p 001-3018.

[1071] ATE Insurance Policy clauses 4.8 to 4.10 p 001-2405.

[1072] ATE Insurance Policy clause 4.11 p 001-2405.

[1073] *Houle v St Jude Medical Inc* 2018 ONSC 6352 at paras 22 to 24.

affidavit:[1074]

946.1. The Claim Funding Agreement entitles KFL to terminate the funding if it believes that the case is "no longer commercially viable".[1075] KFL can further terminate the funding if there has been a "material adverse change to the chances of obtaining the Funder's Return or a Successful Outcome".[1076]

946.2. Neither circumstance requires that there be a breach of the Contingency Fee Agreement by the class representatives or that there be breach by LD or MM of their obligations. The criteria are also vague and undefined, affording KFL with virtually unbounded discretion to terminate the Claim Funding Agreement.[1077]

946.3. Should MM wish to terminate the Contingency Fee Agreement, it must also obtain the Funder's prior written approval.[1078]

946.4. KFL (as a borrower) is in turn accountable to the Luxembourg investment funds: following an event of default under the Facility Agreement, "the Borrower shall act on the instructions of the Lenders as to [the enforcement and preservation of any rights, claims or actions the Borrower may have pursuant to the fending arrangements".[1079] The

[1074] AA paras 919.1 to 920 p 001-3019.

[1075] Amended Claim Funding Agreement clause 12.2.2 p 001-9827.

[1076] Amended Claim Funding Agreement clause 12.2.1 p 001-9827.

[1077] AA para 919.8.3 p 001-3019.

[1078] Amended Claim Funding Agreement clause 4.1.6 p 001-9819.

[1079] AA para 920 p 001-3020; Amended Senior Credit Facility Agreement clause 8.21 p 001-9854.

Luxembourg funds also enjoy security interests over KFL's assets.[1080]

946.5. Further, there appears to be no restriction in the Claim Funding Agreement on the ability of KFL to assign the agreement to another party.[1081]

947. Mr Hanna argues that, because KFL's decision to terminate the funding agreement can (if disputed) be referred to an independent Senior Counsel, this ensures that funding cannot be "capriciously withdrawn".[1082] His argument, however, misses the point.

948. The concern with the funders' level of control over the litigation is not to govern the rationality or otherwise of KFL's assessment of commercial expedience on terminating the funding. KFL may very well act rationally as a self-interested entity aimed at making maximum profits in this regard. That is, after all, its role. The concern instead is that the funders' ability to terminate the funding at the whim of commercial expedience (albeit commercially rational) implicates the suitability of the class representatives as litigants to act on behalf of hundreds of thousands of other people.

949. Third, the funders have the right to access all pleadings, witness statements and other relevant documents before they are filed, a right necessarily enabling them to influence the content of those documents. The entitlements go beyond simple information flow required for the benign monitoring of the case and appears to

[1080] AA para 920 p 001-3020.

[1081] AA para 922 p 001-3020.

[1082] Hanna affidavit para 35 p 001-9727.

be geared towards allowing the funders control of the litigation.[1083]

950. The amended Claim Funding Agreement explicitly obliges LD and MM to provide the Funder with the "Case Information" promptly and "prior to filing the information at Court".[1084] The "Case Information" is broadly defined to include "all material information concerning the Case and the Class Members, including, but not limited to, legal advice, witness statements, statements of case and pleadings, expert reports, costs budgets, court orders, search results for disclosable documents and inter-parties correspondence, in particular relating to settlement and, otherwise, such information as the Funder may reasonably request from time to time."[1085]

951. Mr Hanna's reply to these concerns is contradictory. On one hand he denies that these obligations indicate "control" over the litigation.[1086] Yet, in the same breath he argues that the funders' influence over court papers before they are filed will advance the administration of justice by allowing for additional lawyers to review (and thereby influence) the papers.[1087] This despite the fact that those additional lawyers will represent the funders' best interests and not those of the classes.

952. That the funders do not exert control over the litigation is further contradicted by Mr Hanna's defence of the funders' right to see documents before they are filed. This, Mr Hanna says, is so that the funder can have "visibility" over whether a

[1083] AA para 913 p 001-3015.

[1084] Amended Claim Funding Agreement clauses 4.1.9 and 4.2.1cp 001-9819. Emphasis added.

[1085] Amended Claim Funding Agreement definition of "Case Information" p 001-9811.

[1086] Hanna affidavit paras 28 to 30 p 001-9724.

[1087] Hanna affidavit paras 28 to 30 p 001-9724.

course of action is being committed to which could impact the commercial rationale of the investment.[1088] What good is that visibility before the papers are filed, however, if not for the funder to influence the proceedings to secure its investment?

953. In addition to this, KFL, AVL and the Augusta group are entitled to be regularly updated by MM and LD.[1089] MM must also inform KFL if the class members threaten to abandon, withdraw or discontinue the case.[1090] In turn, KFL is obliged to promptly inform the Luxembourg investment funds of all circumstances having a material effect on the nature of the Kabwe claim, including preliminary settlement discussions.[1091]

954. LD is required to arrange at KFL's request for MM, counsel and LD to meet with KFL Finance and to answer any questions KFL may raise.[1092] LD shall "provide a Monthly Report update to the Funder regarding progress of the Case".[1093]

955. The Luxembourg investment funds enjoy rights to be informed of any material circumstances bearing on the class action, including settlement discussions.[1094]

956. These information-sharing provisions must be contrasted with the lack of mechanisms and processes designed to inform the class representatives and

[1088] Hanna affidavit para 30 p 001-9725.

[1089] AA para 913.1 p 001-3015.

[1090] AA para 913.2 p 001-3015.

[1091] AA para 913.4 p 001-3015.

[1092] AA para 913.5 p 001-3015.

[1093] AA para 913.6 p 001-3015.

[1094] AA para 913.7 p 001-3015.

class members.[1095] For example, despite the class representatives' distance from the Court and proceedings, their contracts with MM do not similarly secure their right – by way of express agreement or otherwise – to view and influence any (let along every) court filing before it is filed.

957. Finally, the agreements that KFL and AVL have concluded with the other parties to the funding scheme, indicate that the funders anticipate and expect to exert control over the litigation.

958. For example, the December 2020 Consultancy Agreement between KFL and AVL says that "the Company" (i.e. KFL) "has sole authority to approve the Litigation Investment and the Case".[1096] The "Case" is defined as "the environmental opt-out class action on behalf of the Claim Participant".[1097] "Claim Participant", in turn, is defined not exclusively as the class members or representatives but inclusive of "any of their advisors, claims managers or intermediaries".[1098]

959. Moreover, the ATE Insurance policy as disclosed in the founding papers listed KFL – and not the class representatives – as the insured party.[1099] As the insured party, the ATE policy imposed a duty on KFL to "act as a reasonably prudent uninsured litigant throughout the Legal Action",[1100] both indicating KFL as the true litigant and assuming KFL's control over the proceedings in order to do so.

[1095] AA para 913.8 p 001-3015.

[1096] Consultancy Agreement clause 3.1 p 001-2598.

[1097] Consultancy Agreement p 001-2594.

[1098] Consultancy Agreement p 001-2594.

[1099] AA para 894.10 p 001-3010; ATE Insurance "Risk Details" Annexure RHH-6 p 001-2392.

[1100] ATE Insurance Policy para 5.11.1 p 001-2410.

In the replying papers, the applicants have attempted to fix this by now adding the class representatives to the Policy Schedule – in addition to KFL – as the insured party.[1101] It remains nonetheless that, contractually, KFL is obliged to "act as a reasonably prudent uninsured litigant throughout the Legal Action", the unavoidable inference being that either it has undertaken duties it cannot fulfil (rendering the ATE insurance subject to cancellation) or it undertakes (with knowledge of its capacity) to influence the proceedings and control them as a litigant.

The funding arrangements also afford the lawyers control over the litigation

960. Anglo's second category of concerns is that the funding arrangements preserve the lawyers' control over the litigation, and in particular that of LD as the dominant firm.

961. The applicants do not deny that the agreements say on their face that MM will have control over the litigation, contrary to the legal requirement that the class representatives (not the attorneys or funders) be in control of the litigation.[1102]

962. In the amended Contingency Fee Agreement, a new clause has been added to the section on settlements. It states that the parties agree that should the clients not be willing to settle their claim on terms of settlement professionally recommended by MM at any time, that this shall be grounds for MM to unilaterally terminate the contract at its sole discretion.[1103] Because the class

[1101] ATE Insurance Policy Schedule clause 2 p 001-9867.

[1102] AA para 841 p 001-2976; RA para 632.1 p 001-7805.

[1103] Clause 25 p 001-8989.

representatives have not contracted directly with the funder, but though MM, the consequence of MM terminating the Agreement will be that the classes will lose their funding, and in turn that the ATE insurance is lost. The class representatives have no real say in settlement proceedings in this context, should they disagree with the views of their attorneys.

963. But the arrangements belie even (impermissible) control on the part of MM. In her judgment, Windell J accepted the contention that Anglo makes in these proceedings that the class representatives are "represented primarily by [LD] who are based in the United Kingdom … and, secondarily, by South African attorneys [MM] as well as several counsel".[1104] Windell J considered that LD's primary role was evident from the Budget Summary that the applicants disclosed in the compelling application. This indicated that LD's fees are projected to exceed the combined total of the South African attorneys and counsel by over 270%.[1105]

964. The scope of LD's tasks is extensive and substantive. For example, LD is charged with formulating the "litigation strategy, resolution strategy and settlement negotiation strategy".[1106] Its role extends from taking instruction from clients and maintaining client data, to trial preparation, instruction of experts and preparation of expert reports, to assisting counsel, and settlement discussions. It appears that LD will be doing all of this 12,000 km removed from their clients

[1104] Windell J judgment para 3 p 084-2.

[1105] Windell J judgment para 3 p 084-3. See also AA para 842.4 p 001-2977.

[1106] AA para 842.3 p 001-2977.

– a situation which underlines the lack of control the clients exert.[1107]

The arrangements disempower the classes from exercising control over the litigation

965. Anglo's third concern is that the classes are relatively disempowered. The influence and access that is secured by contract, and the access to resources and knowledge of the funders and LD, must be contrasted with the position of the thirteen class representatives.

966. They are, with one exception, children – most are toddlers – represented by their parents. They live in central Zambia, almost 2,000 km from the seat of the litigation in Johannesburg, and almost 12,000 km from where the funders and LD make their decisions about the conduct of the litigation, in London.[1108] The class representatives are by and large indigent, and they live in communities where many people do not have access to electricity, smart phones or television.[1109]

967. The power imbalance between the class representatives and the funders and their lawyers is complete. There is no sign in the founding papers that the class representatives are adequately supported to make meaningful contributions to the decision-making in this litigation, whether day-to-day, or on major matters like settlement or withdrawal.[1110] There is no indication that they have received independent legal advice on the terms of the funding agreements.[1111] On these

[1107] AA para 842.3 p 001-2977.

[1108] AA para 844 p 001-2978.

[1109] AA para 844 p 001-2978.

[1110] AA para 845 p 001-2978.

[1111] AA para 928 p 001-3022.

facts, they are certainly not, in any real sense, in a position to give their lawyers instructions or to exercise control over the litigation in the best interests of the classes.[1112]

968. The applicants' response to these contentions is to claim that they are "incorrect and frankly offensive".[1113] Ms Mbuyisa says that she has "made a number of trips to Kabwe" and that there have been no issues communicating with the communities remotely "due to a supposed lack of electricity or smartphones".[1114]

969. It goes to the heart of the matter that Ms Mbuyisa did not respond by setting out how these pointed concerns will be managed – no plan or concrete methodologies are set out for how the class representatives and members will be enabled to actively participate in and instruct their London and Johannesburg-based attorneys. No explanation is given in concrete terms with how the class representatives (and least of all the potential future class members) will be facilitated at least equal access to information and influence as the funders and insurer are contractually guaranteed.

970. Moreover, we emphasise that the very facts which found Anglo's concerns are drawn from the applicants' own evidence, [1115] notwithstanding Ms Mbuyisa's sarcastic denials of the "supposed lack of access to electricity or smartphones".[1116] It is perplexing how Ms Mbuyisa on one hand relies on these

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[1112] AA para 845 p 001-2978.

[1113] RA p 001-7756.

[1114] RA para 281 p 001-7756. Emphasis added.

[1115] See: FA para 310.1 p 001-138; Moyo affidavit para 12 p 001-2314; para 14 p 001-2315; para 15 p 001-2316.

[1116] RA para 481 p 001-7756.

facts of the classes' relative disempowerment and lack of access to communication in her founding affidavit and on the other hand says that there will be no issues with "performing a whole or part of their business remotely".[1117] Ms Mbuyisa herself bemoaned the complexities and time it took simply to take instructions from some 1 058 clients in Kabwe.[1118]

971. In the very least, Ms Mbuyisa ought to have taken the Court into her confidence on how MM intends to ensure the full and effective participation of the class representatives and members on an ongoing basis in the litigation, including the participation of the children where age-appropriate. The special duties that are placed on legal representatives acting on contingency for parents or guardians representing children have been dealt with by the Courts.[1119] Nowhere has Ms Mbuyisa disclosed how these specific duties will be fulfilled to ensure the children's views and interests inform the litigation.

972. The Australian Federal Court explained that whether the class representatives are suitable is important because other class members are "effectively deprived of a right to appear and to make effective decisions concerning the prosecution of his or her claim, an essential element of the judicial process – the right to be heard – is lacking."[1120] In this case, the class representatives are not capacitated to make effective decisions on behalf of the class members, by virtue of the power and informational imbalance set out above.

[1117] RA para 481 p 001-7756.

[1118] FA para 310.1 p 001-138.

[1119] See, for example, *Kedibone obo MK and another v Road Accident Fund (Centre for Child Law as Amicus Curiae) and a related matter* [2021] JOL 50051 (GJ).

[1120] *Bright v Femcare Ltd* (1999) 166 ALR 743 at para 11.

973. The Canadian case of *David v Loblaw*[1121] of the Superior Court of Justice of Ontario highlighted several factors which indicated that a funding agreement was fair and reasonable. These included that the claimants had the sole right to direct the proceedings and instruct their legal representatives, that the claimants received independent legal advice on the terms of the funding agreement, and that the funders' obligations were sufficient to cover any adverse costs award. These considerations do not favour certification in this case.

Conflict of interest

974. Closely linked to the lack of capacity of the class representatives to control and influence the course of the litigation, is Anglo's concern with the potential for the funders' and legal representatives' conflict of interest with that of the class.[1122] The SCA in *Children's Resource Centre* held that where the litigation is funded on contingency, the Court must be "satisfied that the litigation is not being pursued at the instance of the lawyers for their own gain rather than in the genuine interests of class members, as the risk of conflicts of interest is inherent in that situation."[1123] We submit that the same applies to third party funding.

975. Whether there is a risk of conflict of interest is something which the Court must assess objectively. Ms Mbuyisa and Mr Hanna's indignation towards these concerns misses the point. Whether a potential conflict of interest implicates the

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[1121] *David v Loblaw* 2018 ONSC 6469.

[1122] In *Robinson vs Randfontein Estate Gold Mining Co Ltd* 1925 AD 168 at 178-19 1, Innes CJ held that:

> "Conflict of interest rests upon the broad doctrine that a man, who stands in a position of trust towards another, cannot, in matters affected by that position, advance his own interest (e.g., by making a profit) at that other's expense."

[1123] Paras 47 to 48.

suitability of the class representatives or their legal representatives is not a subjective consideration. It has nothing to do with the private intentions or ethics of the lawyers, but with the structural arrangements that bear on their decision-making or that have the potential to do so. As observed in the US case of *Pearson v NBTY Inc*:[1124]

> "Class counsel rarely have clients to whom they are responsive. The named plaintiffs in a class action, though supposed to be the representatives of the class, are typically chosen by class counsel; the other class members are not parties and have no control over class counsel. The result is an acute conflict of interest between class counsel, whose pecuniary interest is in their fees, and class members, whose pecuniary interest is in the award to the class."[1125]

976. It is contrary to the interests of justice if the funding arrangements give the legal representatives and funder of the class "an incentive to negotiate settlements that enrich themselves but give scant reward to" the class members.[1126]

977. Where, as in this case, the class members are in a different country from their lawyers, the Court, the funder and the foreign legal consultants, all of whom – unlike the class members – have contractually-guaranteed rights to information and influence over the proceedings, these responsiveness-risks are only heightened.

978. In *De Bruyn* the Court stressed that the "funding arrangements must not compromise the requirement that the litigation is conducted in the interests of

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[1124] *Pearson v NBTY Inc* 772 F.3d 778 (7th Cir. 2014).

[1125] At 787, available at: https://casetext.com/case/pearson-v-nbty-inc-2.

[1126] *Thorogood v Sears, Roebuck & Co*. 627 F.3d 289, 293 (7th Cir. 2010).

class members".[1127] The SCA in *National Potato Cooperative* has warned that third party funders, incentivised by profit, should not be able to take over litigation for their own benefit.[1128] The funding arrangements should also preserve the attorneys' independence from the third-party funder to ensure the litigation is conducted in the interests of class members.[1129]

979. The SCA in *Children's Resource Centre* considered that a conflict of interest would arise if the purpose of the litigation is to enrich the representatives, or to serve interests other than those of the class.[1130]

980. The ATE insurance policy creates a conflict of interest for the legal representatives, the funder and the class. Even in the amended Schedule to the policy, it remains that KFL is under an obligation to instruct MM to, amongst others, comply with the insurer's requests for information, to afford the insurer the opportunity to attend meetings, consultations with the insured's legal representative and any expert witnesses.[1131] MM is therefore acting on instructions from both KFL and the class representatives.

981. Apart from this, the overarching nature of the funding arrangements creates multiple, overlapping conflicts of interest.[1132] The proper purpose of funding arrangements would have been to enable the potential class to litigate their

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[1127] Para 81.

[1128] *Price Waterhouse Coopers Inc and others v National Potato Co-Operative Limited* [2004] 3 All SA 20 (SCA) at para 12.

[1129] *De Bruyn v Steinhoff International Holdings NV and others* 2022 (1) SA 442 (GJ) at para 81.

[1130] *Trustees for the time being of Children's Resource Centre Trust v Pioneer Food (Pty) Ltd* 2013 (2) SA 213 (SCA) at paras 47-48.

[1131] ATE Insurance Policy clauses 5.5.1 – 5.5 p 001-2406; AA para 902 p 001-3012.

[1132] AA para 908 p 001-3014.

claims for their own benefit, by enabling them to properly instruct lawyers and experts. Any profit for the funder should have been an ancillary by-product of assisting the class to vindicate its rights. Instead, as has been detailed above, the funding arrangements are geared to afford the funder maximal control over the conduct of the litigation at the expense of the class representatives; and enrich the funders at the expense of the class members.[1133]

982. In response to the concern of conflict of interest, Mr Hanna makes much of the fact that AVL is a member of the Association of Litigation Funders and a signatory to the voluntary and non-binding Association of Litigation Funders Code ("the Code").[1134] It is questionable whether the applicants enjoy the protection of the Code. The Code in its own terms applies to "Relevant Disputes", which are defined as "disputes whose resolution is to be achieved principally through litigation procedures in the Courts of England and Wales".[1135] The Code is in any event non-binding in comparison with the binding terms of the funding agreements.

983. Cumulatively, these considerations demonstrate overlapping conflicts of interest at the expense of the foreign classes to meaningfully control the litigation. This is contrary to the interests of justice.

Conclusion

984. We demonstrate several inter-related reasons why the proposed funding

[1133] AA para 908 p 001-3014.

[1134] Hanna affidavit paras 18 to 21 pp 001-2343 to 001-2344.

[1135] AA para 907 p 001-3014; Code of Conduct for Litigation Funders clause 1 p 001-2351.

arrangements do not meet the test for certification. Taken cumulatively, the prejudice to Anglo, to the potential class members, and to the administration of justice is significant. The class action should not be certified for these reasons.

COSTS

985. Two questions relating to costs fall to be decided by this Court:

985.1. the first is whether Anglo should be required to pay the costs of giving notice to members of the proposed classes; and

985.2. the second is the costs order this Court should make in respect of the certification application generally.

The costs of the notice to class members

986. The applicants ask for the following relief in respect of notice to members of the proposed classes:

986.1. that the applicants' legal representatives be required to effect the notice (by publication in newspapers, over the radio and on church notice boards);[1136]

986.2. but that Anglo be required to pay all the costs of publication (which effectively affords the applicants an open cheque book to spend as much as they like).[1137]

987. Even if this class action were to be certified, the applicants would not be entitled to the latter relief. Our courts have recognised that requiring a respondent to pay the costs of publication at certification stage can be unfair, given that a

[1136] NOM prayer 4 (inclusive) p 001-3.

[1137] NOM prayer 7 p 001-4.

respondent has not at this stage been found to be liable to class members, and may never be. This reasoning is of application to this case – requiring Anglo to pay the costs of publication before the applicants' claim has even succeeded (and may never succeed) would be unfair.

988. In *Ngxuza* the applicants sought at certification an order requiring the respondents to bear the costs of publication. Froneman J (as he then was) refused the request, holding as follows:

> "The applicants also seek an order at this stage that the respondents should bear the cost relating to the publication, broadcasting and distribution of the proposed notice. In support of this reliance was placed on s 7(2) of the Constitution and Indian case law. In my view this contention cannot be upheld. … In a sense such an order will also prejudge the outcome of the case. All that has happened thus far is that I have ordered that the applicants may proceed with a class action. <u>The result of the action is not a foregone conclusion.</u> I think it will be much better if the question of these costs is determined at the conclusion of the main action."[1138] (Emphasis added)

989. The default position, thus, should be that the applicants bear the costs of publication at certification. They can attempt to reclaim these costs from the defendant at the end of the trial.

990. The facts in the applicants' papers militate in favour of the default position:

990.1. The applicants are funded by commercial litigation funders that stand to benefit handsomely from a judgment or settlement in their favour. It is

[1138] *Ngxuza v Permanent Secretary, Department of Welfare, Eastern Cape* 2001 (2) SA 609 (E) at 632F – H.

only fair that they bear the costs of publication at certification stage.

990.2. The applicants appear to concede in the founding affidavit that they have budgeted to bear these costs.[1139] Affordability is not an issue.

991. The cases in which the respondent has been required to pay for the costs of publication at certification are distinguishable. The first such case is *Nkala*:

991.1. There, the respondent mines were held to be wholly responsible for publishing the notice on noticeboards at their mines, as well as on their websites.[1140] This made sense, given that the mines controlled these fora. But they were also required to pay for half of the costs of publishing the notice elsewhere (in newspapers, over the radio, etc.).[1141]

991.2. In this latter respect, *Nkala* is distinguishable, for the following reasons:

991.2.1. First, the respondents were only held liable for half of the applicants' costs of publication – not all of them, as the applicants seek in this case.

991.2.2. Secondly, the majority judgment contains no reasoning to justify requiring the respondents to pay even half of the costs of publication. *Nkala* is thus of limited precedential value in this respect.

[1139] FA para 302.8 p 001-134.

[1140] *Nkala v Harmony Gold Mining Co Ltd* 2016 (5) SA 240 (GJ) at para 230 subpara 6.2.

[1141] *Nkala v Harmony Gold Mining Co Ltd* 2016 (5) SA 240 (GJ) at para 230 subpara 6.1 read with subpara 12.

991.2.3. Thirdly, here the funders have specifically budgeted to pay for publication, and there is no indication in *Nkala* that this was so for the attorneys funding that case.

992. The second case in which the court required the respondent to pay the costs of publication at certification is *Stellenbosch Law Clinic*:

992.1. There, the respondents were required to pay all of the notice costs at certification.[1142]

992.2. But *Stellenbosch University Law Clinic* is also distinguishable. First, the litigation was not funded by profit-making litigation funders – it was run by the Stellenbosch University Law Clinic, an NGO. Secondly, the primary forms of publication were mail, email and SMS to potential class members using contact details on the respondents' databases.[1143] It thus made sense for the respondents to bear the costs of publication on certification, and not the Law Clinic. This case is completely different. The applicants here are funded by profit-making litigation funders, and the applicants' proposed notice procedures do not involve Anglo at all.

993. We submit that if this Court grants certification, it should refrain from granting prayer 7 of the notice of motion. The applicants should bear the costs of publication at certification and may attempt to tax these costs as disbursements

[1142] *Stellenbosch University Law Clinic v Lifestyle Direct Group International (Pty) Ltd* 2022 (2) SA 237 (WCC) at para 97 subpara C(7).

[1143] *Stellenbosch University Law Clinic v Lifestyle Direct Group International (Pty) Ltd* 2022 (2) SA 237 (WCC) at para 97 subpara C6.1 – C6.3.

should they be successful in the trial.

The costs of this application

994. A certification order is interlocutory.[1144] The respondent's liability is not finally decided at certification stage – it is decided at the trial, should certification be granted.

995. In this sense, certification is like an interim interdict. An interim interdict does not finally determine an applicant's rights. This occurs only when the final relief is determined. As such, when an interim interdict is granted, a court will generally order costs to stand over to when final relief is determined;[1145] but when an interim interdict is refused, the applicant will ordinarily be required to pay the respondent's costs in opposing the interim interdict.[1146]

996. There is authority for applying this set of rules to the certification of class actions. In *Ngxuza*, certification was granted and no order for costs was made in respect of certification.[1147] And in *De Bruyn*, certification was refused and the representative applicant was required to pay the respondents' costs.[1148]

997. While the depth of a litigant's pockets is not determinative of whether she should be mulcted in costs,[1149] it should not be forgotten that the applicants' funders

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[1144] *Permanent Secretary, Department of Welfare, Eastern Cape v Ngxuza* 2001 (4) SA 1184 (SCA) at para 29.

[1145] *Gray v Goodwood Municipality* 1943 CPD 78 at 85.

[1146] *Goldsmid v The South African Amalgamated Jewish Press Ltd* 1929 AD 441 at 446.

[1147] *Ngxuza v Permanent Secretary, Department of Welfare, Eastern Cape* 2001 (2) SA 609 (E).

[1148] *De Bruyn v Steinhoff International Holdings NV* 2022 (1) SA 442 (GJ) at para 302.

[1149] *Biowatch Trust v Registrar Genetic Resources* 2009 (6) SA 232 (CC) at para 16.

have procured ATE insurance that is intended to indemnify them against an adverse costs order. The applicants are among the beneficiaries of this insurance,[1150] and it makes specific provision for compensation in the event of an adverse costs order at certification.[1151] A costs order adverse to the applicants for certification would thus be paid by overseas insurers, and not by the applicants themselves.

998. As such, we submit that the following approach should be followed in respect of the costs of certification:

998.1. If certification is granted, costs should stand over, to be determined at the trial.

998.2. If the application for certification is dismissed, it should be dismissed with costs, including the costs of three senior and three junior counsel,[1152] given the complexity of the matter and the stakes for Anglo.[1153]

[1150] Hanna third affidavit para 19 p 001-9722.

[1151] Hanna third affidavit para 8 p 001-9867.

[1152] The applicants seek costs for three senior and three junior counsel.

[1153] AA p 001-3158.

CONCLUSION

999. Anglo submits that the application should be dismissed with costs, including the costs of three senior and three junior counsel.

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